Ontrack® PowerControls™

Version 6.1

User Guide

Instructions for Operating Ontrack PowerControls ExtractWizard

NOTICE TO USERS

Ontrack® PowerControls™ is a software application that has been developed, copyrighted, and licensed by Kroll Ontrack Inc. Use of the software is governed by the terms and conditions of the end user license agreement contained within the software.

This manual should not be construed as any representation or warranty with respect to the software named herein. Occasionally, changes or variations exist in the software that are not reflected in the manual.

Generally, if such changes or variations are known to exist and affect the product significantly, a release note or Read Me file will accompany the User Guide, or will be available on the Ontrack PowerControlsweb site. In that event, please read the release notes or Read Me file before using the product.

TRADEMARKS

Kroll Ontrack, Ontrack, Ontrack PowerControls, and other Kroll Ontrack brand and product names referred to herein are trademarks or registered trademarks of Kroll Ontrack Inc., and/or its parent company Kroll Inc., in the United States and/or other countries. All other brand and product names are trademarks of their respective owners.

Microsoft, Exchange, SharePoint, Windows and other Microsoft brand and product names referred to herein are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

All other brand and product names are trademarks of their respective owners.

COPYRIGHTS

Copyright © 2011 Kroll Ontrack Inc. All rights reserved.

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into a language or computer language, in any form by any means, electronic, mechanical, optical, chemical, manual or otherwise, without the express written consent of Kroll Ontrack Inc.

CONTACT INFORMATION

For contact information for our worldwide locations, see

http://www.krollontrack.com/contact-us/

CONTENTS

Introduction 1

Overview 1

Ontrack PowerControls 6.1 ExtractWizard Enhancements 1

System Requirements 2

Prerequisites 3

Installing Ontrack PowerControls 3

Uninstalling Ontrack PowerControls 4

Ontrack PowerControls Licensing 4

Enabling the Licensed Agents 4

The License File 6

Upgrading Ontrack PowerControls 6

Getting Help 7

Online Help 7

Technical Support 7

Conventions in this Manual 7

Notes and Tips 8

Chapter 1: Using the Ontrack PowerControls ExtractWizard Direct Method 9

Overview 9

Ontrack PowerControls ExtractWizard 10

Welcome Page 10

Method of Extraction 10

Direct Method 11

Extraction Source 12

Catalog Performance Options 12

Catalog Progress 14

File Selection 14

Destination Folder 22

Copy Progress 23

Completing the Wizard 23

Organizing the Extracted Files for Ontrack PowerControls 24

Ontrack PowerControls ExtractWizard for Exchange 24

Ontrack PowerControls ExtractWizard for SharePoint 24

Copyright © 2011 Kroll Ontrack Inc.

Chapter 2: Using the Ontrack PowerControls ExtractWizard Advanced Method 25

Overview 25

Two Modes of Operation 25

API Method 25

Exchange Emulation 26

Using the API Method 27

Using the API Method for IBM Tivoli Storage Manager 27

Using the API Method for EMC NetWorker 31

Chapter 3: Using the Exchange Emulation Method 37

Overview 37

Two Basic Steps for Using the Exchange Emulation Method 37

Requirements for Using the Exchange Emulation Method 38

Types of Backup Software 39

Chapter 4: Using the Exchange Emulation Method - Windows NT Backup 41

Overview 41

Exchange Emulation for NT Backup: Exchange Server 2000/2003/2007 on Windows 2000, Windows XP, and Windows Server 2003 41

Exchange Emulation for NT Backup: Exchange Server 5.5 on Windows 2000, Windows XP, and Windows Server 2003 45

Exchange Emulation for NT Backup: Exchange Server 5.5 on Windows NT 4 48

Chapter 5: Using the Exchange Emulation Method - HP OpenView Storage Data Protector 51

Overview 51

Exchange Emulation for HP OpenView Storage Data Protector and Exchange Server 2000/2003/2007 51

Exchange Emulation for HP OpenView Storage Data Protector a nd Exchange Server 5.5 56

Copyright © 2011 Kroll Ontrack Inc.

Chapter 6: Using the Exchange Emulation Method - Symantec Backup Exec 61

Overview 61

Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 2000/2003 61

Exchange Emulation for Symantec Backup Exec 11d and Exchange Server 2000/2003/2007 65

Exchange Emulation for Symantec Backup Exec 12.0 and 12.5 and Exchange Server 2000/2003/2007 69

Exchange Emulation for Symantec Backup Exec 2010 and Exchange Server 2003/2007/2010 73

Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 5.5 79

Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 2000/2003 82

Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 5.5 86

Chapter 7: Using the Exchange Emulation Method - CA ARCserve Backup 91

Overview 91

Exchange Emulation for CA ARCserve Backup and Exchange Server 2000/2003 91

Exchange Emulation for CA ARCserve Backup 9.x-11.5 SP3 and Exchange Server 5.5 95

Chapter 8: Using the Exchange Emulation Method - NetBackup 101

Overview 101

Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 2000/2003 101

Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 5.5 105

Exchange Emulation for NetBackup 6.0 and Exchange Server 2000/2003 108

Exchange Emulation for NetBackup 6.0 and Exchange Server 5.5 112

Exchange Emulation for NetBackup 6.5.x and 7.0 and Exchange Server 2000/2003/2007 115

Copyright © 2011 Kroll Ontrack Inc.

Chapter 9: Using the Exchange Emulation Method - CommVault Galaxy Backup & Recovery 121

Overview 121

Exchange Emulation for CommVault Galaxy Backup & Recovery 6.1, 7.0, 8.0 and Exchange Server 2007 121

Exchange Emulation for CommVault Galaxy Backup & Recovery 5.0, 5.9, 6.1, 7.0, 8.0 and Exchange Server 2000/2003 125

Exchange Emulation for CommVault Galaxy Backup & Recovery and Exchange Server 5.5 129

Chapter 10: Using the Exchange Emulation Method - UltraBac 135

Overview 135

Exchange Emulation for UltraBac and Exchange Server 2000/2003 135

Exchange Emulation for UltraBac and Exchange Server 5.5 139

Chapter 11: Using the Native Method - NetBackup 7.0 143

Overview 143

Native Restore Method for NetBackup 7.0 143

Chapter 12: Using the Native Method - CA ARCserve R15 145

Overview 145

Native Restore Method for CA ARCserve R15 145

Glossary 147

Index 149

Copyright © 2011 Kroll Ontrack Inc.

INTRODUCTION

Overview

Welcome to Ontrack® PowerControls™ 6.1, the software that lets you restore Exchange Information Store data from tape and disk backups to any alternate location (for example, machine, volume, folder), thereby eliminating the need for a recovery server. In contrast, most backup programs let you restore Exchange data only to the same or duplicate server from which it was backed up.

Ontrack PowerControls ExtractWizard also supports Microsoft® SQL Server® 2005 up to SP3 or Microsoft SQL Server 2008 up to SP2 or Microsoft SQL Server 2008 R2 including Remote Blob Store (RBS) backups, of Microsoft Office SharePoint® Server 2007 up to SP2 and Microsoft Office SharePoint Server 2010 (MDF, NDF, and associated log files). It offers support for SQL backups and native SharePoint backups as files or on tapes. Ontrack PowerControls ExtractWizard supports the Direct Method only for SharePoint database backup extractions.

This user guide provides step-by-step instructions for completing specific tasks on the Microsoft® Windows-based platform. See the table of contents or the Index to locate the pages on which particular topics are discussed.

Use Adobe® Acrobat® to open the PDF version of this user guide. After you open the PDF file, click the Hand tool to view the Table of Contents hyperlinks in layout view. Then click a hyperlink to jump to a specific topic in the manual.

Ontrack PowerControls 6.1 ExtractWizard Enhancements

Ontrack PowerControls 6.1 ExtractWizard provides support for:

- Direct and Advanced Method for NetBackup™ 7.0 backups
- Direct and Advanced Method for Symantec™ Backup Exec™ 2010 backups
- Direct Method for CA ARCserve® Backup R15 backups
- Direct and Advanced Application Program Interfact (API) method for EMC® NetWorker® 7.6 backup
- Native Restore Method for NetBackup 7.0
- Native Restore Method for CA ARCserve R15
- Microsoft Office SharePoint Server 2007 and Microsoft® Office SharePoint Server 2010 content database files created using Microsoft SQL Server 2008 and Microsoft SQL Server 2008 R2, including Remote Blob Store (RBS) backups.

Copyright © 2011 Kroll Ontrack Inc.

System Requirements

To use Ontrack PowerControls ExtractWizard on your computer, you need the following hardware and software:

- One of the following operating systems:
  - Windows XP Professional
  - Windows Server 2003 Standard
  - Windows Server 2003 Data Center
  - Windows Server 2003 Enterprise
  - Windows Server 2008 Standard
  - Windows Server 2008 Data Center
  - Windows Server 2008 Enterprise
  - Windows Server 2008 R2
  - Windows Vista® Business
  - Windows Vista Ultimate
  - Windows Vista Enterprise
  - Windows 7 Professional
  - Windows 7 Enterprise
  - Windows 7 Ultimate

  Note: *Ontrack PowerControls ExtractWizard in Windows Vista, Windows Server 2008, Windows Server 2008 R2, and Windows 7 can only be run by users with administrative privileges and in administrative mode.*

  Note: *32-bit and 64-bit versions of the above operating systems are supported.*

  Note: *The HASP HL override key functionality does not work on Windows Vista, Windows Server 2008, Windows Server 2008 R2, and Windows 7 operating systems when using a remote desktop connection to the computer.*

  Note: *NetBackup 6.5.4 and later must be run on the 32-bit (x86) edition of Windows. NetBackup 6.5.4 and later running on a 64-bit (x64) operating system are not supported for Advanced Method.*

  Note: *If you are using Ontrack PowerControls ExtractWizard to restore a Symantec Backup Exec 2010 snapshot backup, Windows Server 2003 or later versions must be used. Windows XP or earlier* ***cannot*** *be used.*

  Note: *64-bit (x64) editions of Windows are not supported for running PowerControls ExtractWizard for Advanced Method restores of non-snapshot Symantec Backup Exec 2010 backups.*

- The following virtual environments are supported:
  - VMware® Server 1.0x, 2.x
  - VMware® Workstation v6.0x, v7.0 x for Windows
  - Microsoft® Virtual Server 2005 R2

Copyright © 2011 Kroll Ontrack Inc.

- Microsoft® Hyper-V™
- Microsoft® Hyper-V Server™ 2008
- Microsoft® Hyper-V Server™ 2008 R2
- Microsoft® Virtual PC 2007
- VMware® ESX/ESXi 3.5, 4.0, 4.1

Note: *Virtual operation of tape devices may have restrictions imposed by virtual operating systems.*

Note: *HASP key operation is validated in environments that support USB attached devices and support the Kroll Ontrack-distributed HASP drivers only.*

Note: *The operating systems listed above are required to have the latest service packs installed.*

- Microsoft® Office SharePoint® Server 2007 up to SP2 data and Microsoft® Office SharePoint® Server 2010 data stored on Microsoft® SQL Server® 2005 up to SP3 or Microsoft® SQL Server® 2008 up to SP2 or Microsoft® SQL Server® 2008 R2.
- Microsoft® .NET Framework 3.5 SP1. System must have .NET Framework 3.5 SP1 installed in order to function.
- Intel® Pentium® 4 class or higher compatible processor
- 1024 MB RAM minimum
- 200 MB of free hard disk space for the installation. More disk space will be needed when processing log files.
- Monitor with 800 x 600 or higher screen resolution
- USB port (for Ontrack PowerControls product licenses requiring HASP key dongle to run application)

Prerequisites

- Ontrack PowerControls ExtractWizard requires that the tape drive be configured and active in the Device Manager.
- Ontrack PowerControls ExtractWizard works best with Windows drivers supplied directly from the manufacturer of the tape drive hardware.
- If Ontrack PowerControls ExtractWizard is installed on your backup server, make sure the services for the backup software are disabled.

Installing Ontrack PowerControls

Follow these steps to install Ontrack PowerControls:

1. Turn off any disk utility or antivirus program running in the background.
2. Insert the Ontrack PowerControls CD-ROM into your CD-ROM drive.
3. The installation program automatically starts. If it does not:

Copyright © 2011 Kroll Ontrack Inc.

- **For Windows Vista, Windows Server 2008, and later:** Click **Run** on the **Start/All Programs/Accessories** menu, and type D:**autorun.exe** or D:**bin\setup.exe**, where D is the drive letter of your CD-ROM drive. Click **OK**.
- **For Windows Server 2003 and earlier:** Click **Run** on the **Start** menu, and type D:**autorun.exe** or D:**bin\setup.exe**, where D is the drive letter of your CD-ROM drive. Click **OK**.

4. Follow the on-screen instructions.

Uninstalling Ontrack PowerControls

You can uninstall Ontrack PowerControls by running the uninstall program.

1. Click **Start** and then click **Control Panel**.
2. In the Control Panel:

   For Windows Vista, Windows Server 2008, and later: Click **Uninstall a program** under the **Programs** heading.

   - Click **Ontrack PowerControls 6.1**, and then click **Uninstall/Change**.

   For Windows Server 2003 and earlier: Click the **Add or Remove Programs** icon.

   - Click **Ontrack PowerControls 6.1**, and then click **Change/Remove**.
   - Click **Yes** when the confirmation dialog box appears.
3. Follow the on-screen instructions.

Ontrack PowerControls Licensing

Ontrack PowerControls ExtractWizard software is licensed-based on the enabled agents.

Ontrack PowerControls ExtractWizard also offers a free edition with limited functionality. With this edition, you can catalog with any enabled agent using only the Direct Method.

Enabling the Licensed Agents

Each edition of Ontrack PowerControls is distributed with 10 Ontrack PowerControls ExtractWizard Agents and seven Ontrack PowerControls Agents. The Ontrack PowerControls ExtractWizard Agent for Microsoft NT Backup is included with the program at no extra cost, and is enabled by default. All other Agents are shipped with all Ontrack PowerControls editions disabled by default and require a new license file to enable them.

Ontrack PowerControls ExtractWizard Agent	Versions Supported	Disk Backup	Tape Backup
Agent for Windows® NT Backup	All Versions	.BKF Files	Microsoft Tape Format (MTF)

Copyright © 2011 Kroll Ontrack Inc.

Ontrack PowerControls ExtractWizard Agent	Versions Supported	Disk Backup	Tape Backup
Agent for Symantec™ Backup Exec™	8.x, 9.x, 10.1, 11d, 12.0, 12.5, 12.5.3 SP4, and 2010	.BKF Files	Microsoft Tape Format (MTF)
Agent for EMC® NetWorker®	6.x and 7.0 through 7.6[3]	.0 Files	NetWorker Tape Format
Agent for CA ARCserve® Backup	9.x, 11.5[2], 11.5 SP3[2,5], 12.0 SP1[6], 12.5 SP1[6], and 15[6]	.CTF (ARCserve) Files	ARCserve Tape Format
Agent for NetBackup™	4.5, 5.x, 6.0, 6.5[1], 6.5.3.1[1], 6.5.6[1], and 7.0[1]	_C1_F (NetBackup) Files	NetBackup Tape Format
Agent for IBM® Tivoli® Storage Manager	5.1, 5.2, 5.3[4], 5.4[4], and 5.5[4]	.BFS and .OST Files	Tivoli Tape Format
Agent for Hewlett-Packard OpenView® Storage Data Protector	4.2, 5.x, and 6.0	User-Defined File Extension	Hewlett-Packard OpenView Storage Data Protector Tape Format
Agent for CommVault® Galaxy® Backup & Recovery	5.0, 5.9, 6.1, 7.0, and 8.0	Backup Path	CommVault Galaxy Tape Format
Agent for UltraBac	7.1 and 8.0	Magnetic Library	UltraBac Software Tape Format
Agent for Native SharePoint Backups	STSADM and Site Administrator	.BAK Files	Microsoft Tape Format (MTF)

[1] **NetBackup 6.x and 7.x**: For backups created using Bare Metal Restore™ or Off-Host Backup, the Advanced Method for extraction must be used.

[2] **CA ARCserve 11.5**: For multiplexed backup tapes, the Advanced Method for extraction is recommended.

[3] **EMC NetWorker 7.2, 7.3, 7.4, 7.5, and 7.6**: For backups created using Advanced File Backups, the Advanced Method for extraction is recommended.

[4] **IBM Tivoli Storage Manager 5.3, 5.4, and 5.5**: For backups created using Export mini format, the Advanced Method for extraction is recommended.

[5] **CA ARCserve 11.5 SP3**: For backups of Microsoft Exchange Server 2007, the Direct Method for extraction must be used.

[6] **CA ARCserve 12.0, 12.5, and 15**: For backups of Microsoft Exchange Server, the Direct Method for extraction must be used.

Copyright © 2011 Kroll Ontrack Inc.

To view the currently enabled Agents

- On the **Help** menu, click **About** and then click **License Info**.

To enable an Agent

1. Contact a sales representative and specify which agent you want to purchase. A license file containing the newly enabled agent will be sent to you.

   Note: *To contact a sales representative, see Contact Information.*

2. Replace the existing .ini file with the new .ini file. The default location for this file is in the Ontrack PowerControls directory.

The License File

All Ontrack PowerControls ExtractWizard editions require a license file. The purpose of this file is to let you enable only the agents you need. Before Ontrack PowerControls ExtractWizard is enabled, it checks the .ini file for three things:

- The license file must be valid for Ontrack PowerControls 6.1
- Subscription length, if applicable.
- Enabled Agents (Ontrack PowerControls ExtractWizard Agents, Ontrack PowerControls Agents)

Upgrading Ontrack PowerControls

If a previous version of Ontrack PowerControls has been installed, is active, and you are upgrading to Ontrack PowerControls 6.1, you will not be able to reuse the existing Ontrack PowerControls license file with Ontrack PowerControls 6.1.

Upgrading Ontrack PowerControls when Kroll Ontrack Administrative Server is Required

If the Kroll Ontrack Administrative Server (KOAS) is required either through the use of the Agent for Administrative Services or for the Central Licensing Service (CLS), **before** upgrading Ontrack PowerControls, it is necessary to first upgrade your KOAS server and optionally configure CLS to use your new Ontrack PowerControls 6.1 CLS license. Please see the KOAS user documentation for details on how to perform an upgrade installation.

To upgrade site installations requiring KOAS when CLS is in use

1. Close all Ontrack PowerControls clients.
2. Upgrade the previous version of KOAS to KOAS 6.1.
3. Start the KOAS management console to verify KOAS has upgraded.
4. Using the KOAS CLS plug-in, in the **License File** tab, configure KOAS CLS to use the Ontrack PowerControls 6.1 CLS license file provided with the delivery of Ontrack PowerControls 6.1 and KOAS 6.1.
5. Follow the instructions and restart KOAS to ensure that CLS is running properly. If the wrong CLS license file is configured, an error displays in the CLS status displays.
6. Use the existing Ontrack PowerControls installation.

Copyright © 2011 Kroll Ontrack Inc.

Note: *Previous Ontrack PowerControls installations can be upgraded to Ontrack PowerControls 6.1 as required.*

To upgrade site installations requiring KOAS when CLS is not in use

1. Close all Ontrack PowerControls clients.
2. Upgrade the previous version of KOAS to KOAS 6.1.
3. Start the KOAS management console to verify KOAS has upgraded.
4. Use existing Ontrack PowerControls installation.

Note: *Previous Ontrack PowerControls installations can be upgraded to Ontrack PowerControls 6.1 as required.*

Getting Help

Kroll Ontrack provides you with the following ways to get help with Ontrack PowerControls: “Online Help” and “Technical Support”.

Online Help

Online Help includes all of the information in the user guide and more, and it lets you quickly access this information by using one of three tabs. The Contents tab offers a hierarchical view of the contents of the user guide. The Search tab offers a full-text search of the user guide. The Index tab offers a keyword-based way to get to specific topics.

Click the Help button to access the help files.

Technical Support

If you have questions or problems not answered in the user guide or the online Help (F1), call our Technical Support group. When reporting an issue, please include any information that might help us diagnose the problem. The following details are often the most helpful:

- The version of Ontrack PowerControls you are using (on the first page of Ontrack PowerControls, click **About**).
- The versions of Windows operating systems that you are running.
- The circumstances and sequence of steps that led to the problem.
- The text of the error messages (if any appeared), and the contents of the **Details** window.
- A list of other Windows-based programs that you were running when the error occurred.

See “Contact Information” at the beginning of this user guide.

Conventions in this Manual

This manual uses guidelines for notes and tips.

Copyright © 2011 Kroll Ontrack Inc.

Notes and Tips

The notes and tips in this user guide follow the guidelines offered in the *Microsoft Manual of Style for Technical Publications*, 3rd Edition. Redmond, WA: Microsoft Press, 2004.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 1

USING THE ONTRACK POWERCONTROLS EXTRACTWIZARD DIRECT METHOD

Overview

If you have not yet extracted backed-up Exchange Information Store data or a SharePoint content database, try using Ontrack® PowerControls™ ExtractWizard. The Ontrack PowerControls ExtractWizard extracts both private and public Exchange Information Store data and SharePoint data from tape, disk backups, to any alternate location (for example, machine, volume, folder), thereby eliminating the need for a recovery server. In contrast, most backup programs let you restore data only to the same or duplicate server from which it was backed up.

You can load SharePoint content database files into Ontrack PowerControls and restore lists, folders, and items to a running SharePoint Server. You can select private and public Exchange Information Store data to extract into objects containing the log files, .edb, and .stm files.

The Direct Method of extracting backed-up Exchange data or SharePoint content data reads the tape or disk file directly without needing the original backup software installed. This method is useful if the original backup software is unavailable and you know the tapes on which the Exchange Information Store or SharePoint database backups reside. For more information, see “Method of Extraction” on page 10.

The Advanced Method uses your existing backup software to extract an Exchange database from a backup server or tape library, across the network, to the computer running Ontrack PowerControls ExtractWizard. The Advanced Method takes full advantage of your backup software’s knowledge of individual set locations and robotic library support. This is the fastest method to extract an Exchange Information Store from the most recent backups managed by your backup server.

For information about the Advanced Method of extracting backed-up Exchange data, see “Using the Ontrack PowerControls ExtractWizard Advanced Method” on page 25.

Copyright © 2011 Kroll Ontrack Inc.

Ontrack PowerControls ExtractWizard

Before proceeding with Ontrack PowerControls ExtractWizard, see “Prerequisites” on page 3.

The Ontrack PowerControls ExtractWizard steps you through the extracting process of both private and public Exchange Information Store data from tape, disk backups, or SharePoint data to any alternate location.

Welcome Page

The first page of Ontrack PowerControls ExtractWizard is the Welcome page which describes the wizard and gives you access to the licensing information.

1. Click **Start**, and then point to **Programs**. Point to **Kroll Ontrack**, then **Ontrack PowerControls**, and click **Ontrack® PowerControls™ ExtractWizard**. The first page describes the wizard.
2. (Optional) To change the location of the license file, click **About** and then click **License Info**. Under **License File Name**, specify a new location. The license file controls which Ontrack PowerControls ExtractWizard agents are active. For more information, see “Enabling the Licensed Agents” on page 4.
3. Click **Next**.

Method of Extraction

The second page of the Ontrack PowerControls ExtractWizard offers two methods of extracting backed-up data: “Direct Method” on page 11 and “Advanced Method” on page 11.

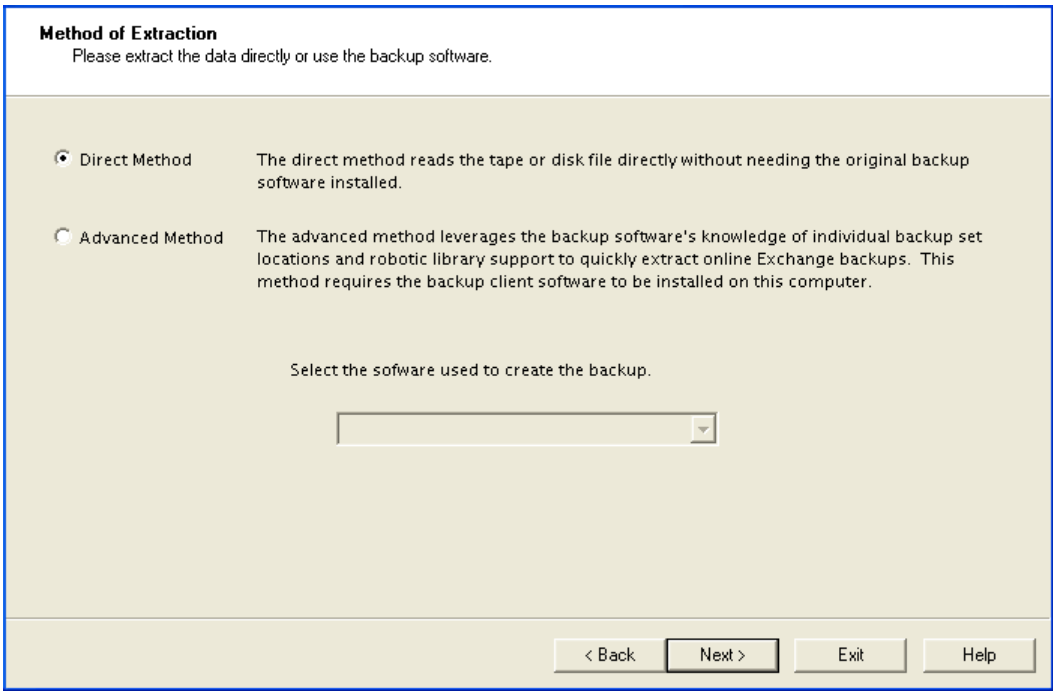
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 1-1. Method of Extraction Page for Direct Method

Copyright © 2011 Kroll Ontrack Inc.

Direct Method

The Direct Method reads the tape or disk file directly without needing the original backup software installed. This method is useful if the original backup software is unavailable and you know the tapes on which the Exchange Information Store backups or SharePoint content databases reside.

The Direct Method has the following requirements:

- The tape drive must be directly attached to the computer and configured and active in the Windows Device Manager.
- The latest Windows drivers supplied directly from the manufacturer of the tape drive hardware should be installed for best results.
- Both online and offline Exchange backups are supported.
- Online SharePoint backups are supported.
- As Ontrack PowerControls ExtractWizard reads tapes one at a time, you must manually insert and eject each tape when prompted.
- If Ontrack PowerControls ExtractWizard is installed on your backup server, make sure the services for the backup software are disabled.

Advanced Method

The Ontrack PowerControls ExtractWizard Advanced Method uses your existing backup software to extract an Exchange database from a backup server or tape library, across the network, to the computer running Ontrack PowerControls ExtractWizard. The Advanced Method takes full advantage of your backup software's knowledge of individual set locations and robotic library support. This is the fastest method to extract an Exchange Information Store from the most recent backups managed by your backup server.

Once configured for the Advanced Method, Ontrack PowerControls ExtractWizard seamlessly integrates with your backup software and fully supports your existing catalogs, backups, and tape library. No other changes to your existing backup architecture or settings are required.

The Advanced Method offers two choices: the API method of extraction and the Exchange Emulation method of extraction. They share the following requirements:

- Only online Exchange backups are supported. This includes full, copy, incremental, and differential backups.
- The backup client software must be installed on the computer running Ontrack PowerControls ExtractWizard.

Note: *The Exchange Emulation method has additional requirements. For information on using the Advanced Method of extracting backed-up Exchange data, see "Using the Ontrack PowerControls ExtractWizard Advanced Method" on page 25.*

Direct Method

Continue using the following steps to use the Ontrack PowerControls ExtractWizard Direct Method for Exchange data or SharePoint data. See "Using the Ontrack PowerControls ExtractWizard Advanced Method" on page 25 for the Advanced Method steps.

Copyright © 2011 Kroll Ontrack Inc.

Extraction Source

On the next page of the Ontrack PowerControls ExtractWizard, select the extraction Source.

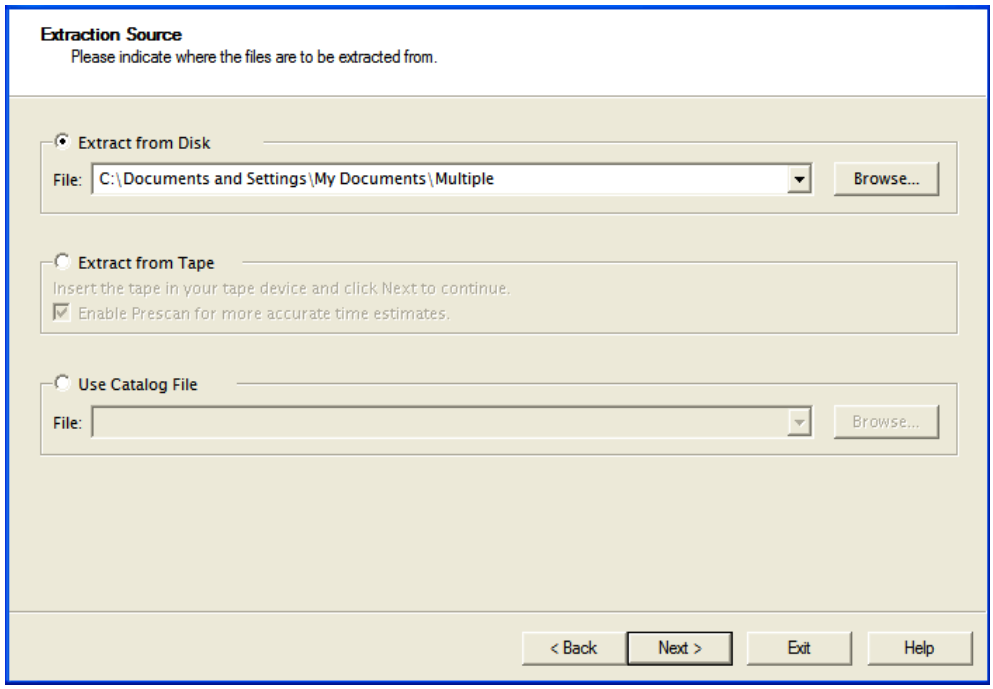

Figure 1-2. Extraction Source Page

Do one of the following:

- Select **Extract from Disk**. Then type the extraction Source file path, use the history drop-down menu, or browse to it. Click **Next**.
- Select **Extract from Tape**. Then insert a backup tape in your tape device and, if desired, select the **Enable Prescan** option for more accurate time estimates. Click **Next**.
- If the Ontrack PowerControls ExtractWizard cannot locate a tape in the selected device, it will prompt you to insert the tape. If you have more than one tape device connected to your system, another screen will appear. Select the device containing the tape.
- Select **Use Catalog File**. Then browse to a previously created catalog file, or use the history drop-down menu. Look for the .ewc extension on the file. Click **Next**.

  Important: *In order to select this option, you must have previously created one or more Ontrack PowerControls ExtractWizard catalog files. For information on creating an Ontrack PowerControls ExtractWizard catalog file, see "Step 3: Saving a Catalog File" on page 22.*

Catalog Performance Options

The Catalog Performance Options page of the Ontrack PowerControls ExtractWizard offers many options for cataloging backup data sets. All six of the options automatically skip over known backup types that do not contain Exchange Information Store files. These types include registry backups, UNIX backups, image backups, NetWare backups, and Macintosh backups.

Copyright © 2011 Kroll Ontrack Inc.

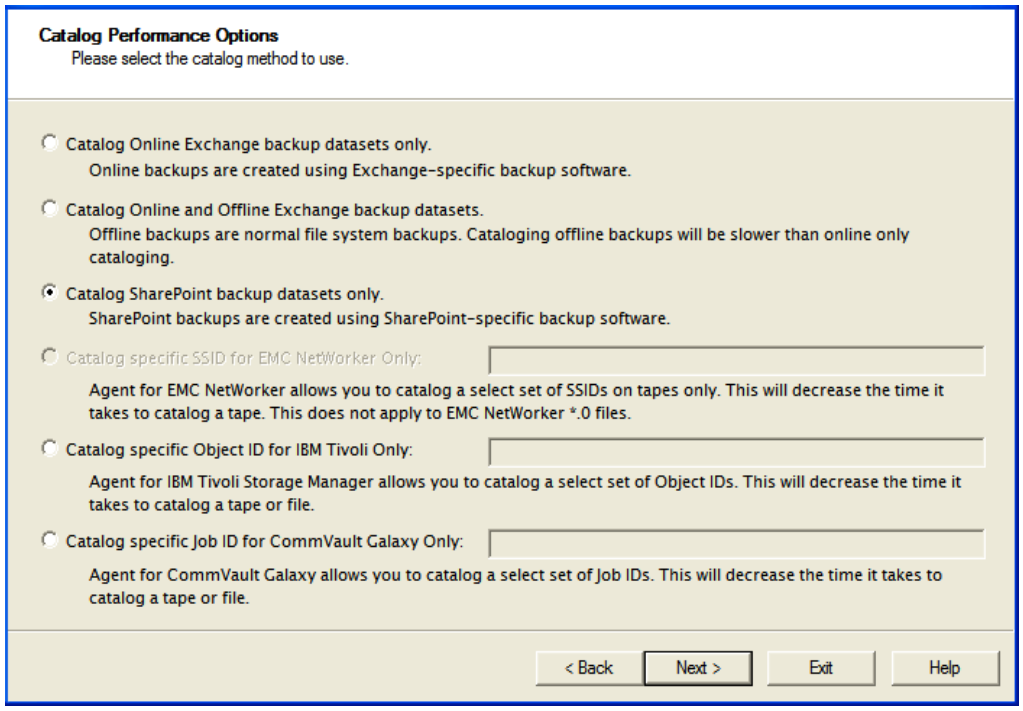
Catalog Performance Options
Please select the catalog method to use.
Catalog Online Exchange backup datasets only.
Online backups are created using Exchange-specific backup software.
Catalog Online and Offline Exchange backup datasets.
Offline backups are normal file system backups. Cataloging offline backups will be slower than online only cataloging.
Catalog SharePoint backup datasets only.
SharePoint backups are created using SharePoint-specific backup software.
Catalog specific SSID for EMC NetWorker Only:
Agent for EMC NetWorker allows you to catalog a select set of SSIDs on tapes only. This will decrease the time it takes to catalog a tape. This does not apply to EMC NetWorker *.0 files.
Catalog specific Object ID for IBM Tivoli Only:
Agent for IBM Tivoli Storage Manager allows you to catalog a select set of Object IDs. This will decrease the time it takes to catalog a tape or file.
Catalog specific Job ID for CommVault Galaxy Only:
Agent for CommVault Galaxy allows you to catalog a select set of Job IDs. This will decrease the time it takes to catalog a tape or file.
< Back
Next >
Exit
Help

Figure 1-3. Catalog Performance Options

To choose a catalog performance option

1. Select one of the following options. Note that all these options will skip known non-Exchange backups (for example, registry, Unix, Mac, Netware).
   - **Catalog Online Exchange backup datasets only:** This option catalogs only known online Exchange backup datasets. It skips all other types of backups. If the backup type is unknown, it is skipped.
   - **Catalog Online and Offline Exchange backup datasets:** This option catalogs known online and offline Exchange backup datasets. If an unknown backup type is encountered, Ontrack PowerControls Extract Wizard catalogs it just in case it is a new backup identifier for Exchange backups. This option is slower because it catalogs more types of backups.
   - **Catalog SharePoint backup datasets only:** This option catalogs only known online SharePoint backup datasets. It skips all other types of backups. If the backup type is unknown, it is skipped.
   - **Catalog SSID for EMC NetWorker only:** Enter a specific Save Set ID (SSID) or a list of SSIDs, separated by commas, in the box. This option is available only if the EMC NetWorker agent is installed and you selected a tape source. Ontrack PowerControls ExtractWizard catalogs only the SSIDs listed. When Ontrack PowerControls ExtractWizard detects the end of the SSIDs in the list, it stops immediately and rewind the tape.

     This option greatly increases the catalog speed for EMC NetWorker users who want to start on a tape in the middle of a span set. If you select a specific SSID search on a non-EMC NetWorker tape, it behaves identically to the second option (Catalog Online and Offline Exchange backup datasets).

Copyright © 2011 Kroll Ontrack Inc.

- **Catalog specific object ID for IBM Tivoli only:** Enter a specific object ID or a list of object IDs, separated by commas, in the box. This option is available only if the IBM Tivoli agent is installed. Ontrack PowerControls ExtractWizard catalogs only the object IDs listed. When Ontrack PowerControls ExtractWizard detects the end of the object IDs in the list, it immediately stops processing.

  This option greatly increases the catalog speed for Tivoli users who know the Object ID of the backup they want to extract. If you select a specific Object ID search on a non-Tivoli tape, it behaves identically to the second option (Catalog Online and Offline Exchange backup datasets).
- **Catalog specific job ID for CommVault Galaxy only:** Enter a specific job ID or a list of job IDs, separated by commas, in the box. This option is available only if the CommVault Galaxy agent is installed. Ontrack PowerControls ExtractWizard catalogs only the sessions associated with the Job IDs entered, both online and offline sessions. Ontrack PowerControls ExtractWizard is unable to know when all data associated with the Job ID has been processed; therefore, Ontrack PowerControls ExtractWizard is unable to stop cataloging early and still needs to process the entire tape. Using this option still greatly increases the speed of the catalog, because all other sessions can be quickly skipped over.

  This option greatly increases the catalog speed for CommVault Galaxy users who know the job IDs of the backup they want to extract. This option also applies to CommVault backup-to-disk files. If you select a specific job ID search on a non-CommVault Galaxy tape, it behaves identically to the second option (Catalog Online and Offline Exchange backup datasets).

2. Click **Next**.

Catalog Progress

The **Catalog Progress** page of the Ontrack PowerControls ExtractWizard displays the progression of the cataloging process and the time remaining until completion. The Ontrack PowerControls ExtractWizard catalogs the disk or tape and locates the data. Cataloging a disk backup is much faster than cataloging a full tape. During cataloging, the Ontrack PowerControls ExtractWizard can be in one of four states: initializing, reading (processing one block at a time), scanning (seeking ahead multiple blocks), and rewinding.

In addition, CommVault Galaxy Backup & Recovery displays a pre-cataloging stage (i.e., reading session information from the backup) after the initializing stage.

Do one of the following:

- Click **Cancel** if you want to stop the catalog process. If you click **Cancel**, the Ontrack PowerControls ExtractWizard catalog will display all files that it found to that point.
- When the catalog is completed, click **Next** to proceed to the next page of the Ontrack PowerControls ExtractWizard.

File Selection

On the **File Selection** page of the Ontrack PowerControls ExtractWizard, you can select both the private and public Exchange Information Store files or SharePoint database backups from which you want to extract. This page of the wizard requires you to perform four steps:

Copyright © 2011 Kroll Ontrack Inc.

Step 1: Viewing an Exchange or SharePoint Backup

Step 2: Extracting an Online or Offline Backup

Step 3: Saving a Catalog File

Step 4: Completing the File Selection

Step 1: Viewing an Exchange or SharePoint Backup

1. On the left side of the window, click the plus sign (+) next to a backup set to view its volumes.
2. Select a volume (select its name, not its check box) to display the files on the right side of the window.

   For example, a Microsoft SQL SharePoint Backup contains two backup sets, each with two volumes. Each backup set lists the session day and time (for example, 4/21/2003 9:46 AM). Each volume lists the machine name the from which the backup originated.

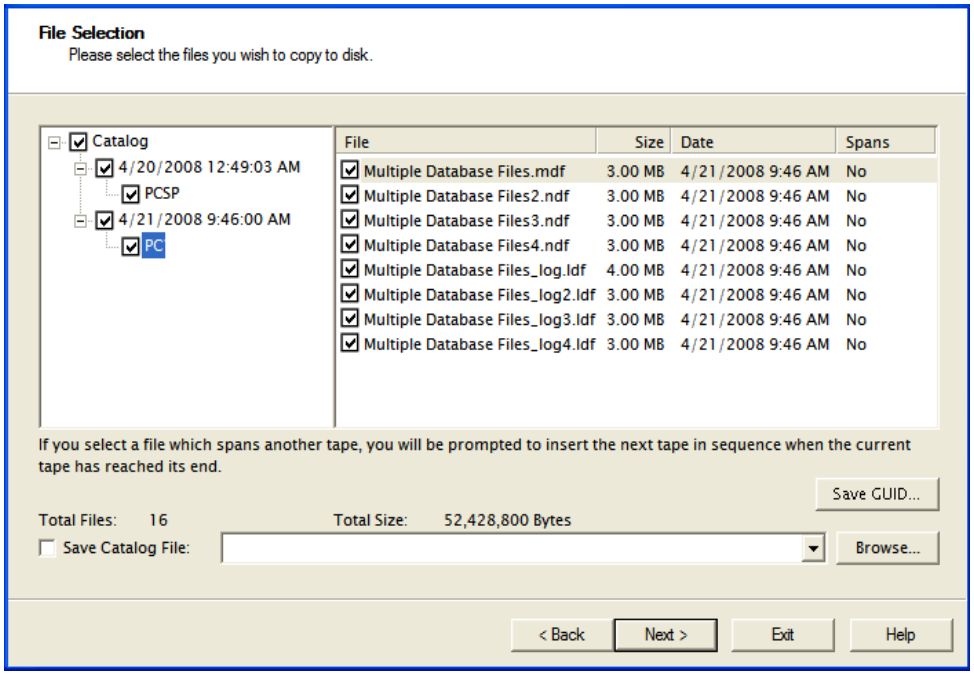
File Selection
Please select the files you wish to copy to disk.
Catalog
4/20/2008 12:49:03 AM
PCSP
4/21/2008 9:46:00 AM
PC
File
Size
Date
Spans
Multiple Database Files.mdf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files2.ndf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files3.ndf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files4.ndf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files_log.ldf 4.00 MB 4/21/2008 9:46 AM No
Multiple Database Files_log2.ldf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files_log3.ldf 3.00 MB 4/21/2008 9:46 AM No
Multiple Database Files_log4.ldf 3.00 MB 4/21/2008 9:46 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Save GUID...
Total Files: 16
Total Size: 52,428,800 Bytes
Save Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-4. Viewing a full online disk backup (Microsoft SQL SharePoint Backup)

3. To save the database GUID from ExtractWizard click the **Save GUID** button. This option allows you to use the GUID for licensing purposes in Ontrack PowerControls for SharePoint. You can then select the location and change the name of the file.

Step 2: Extracting an Online or Offline Backup

After viewing the Exchange information store files or SharePoint backup sets, you can select the files you want to extract. When viewing and selecting files, keep in mind the following points:

- Microsoft NT Backup, Symantec Backup Exec, NetBackup, Native SharePoint Backups, and IBM Tivoli Storage Manager can contain multiple backup sets for both disk and tape backups.

Copyright © 2011 Kroll Ontrack Inc.

- CA ARCserve Backup and EMC NetWorker can contain only one backup set for disk, but multiple backup sets for tape.

To extract a full online (normal) backup

- On the **File Selection** page of the Ontrack PowerControls ExtractWizard, select the .edb, .stm, and .log files, as well as .pat files, if they exist, or the .mdf, .ndf, and .ldf files.

  Example 1: Extracting a **Full Online Disk Backup (Microsoft NT Backup)**
  A Microsoft NT Backup to disk can contain multiple backup sets and volumes. Each backup set lists the session day and time (for example, 8/29/2003 12:34 AM). Each volume lists the machine name and volume name (for example, EXCH\Second Storage Group).

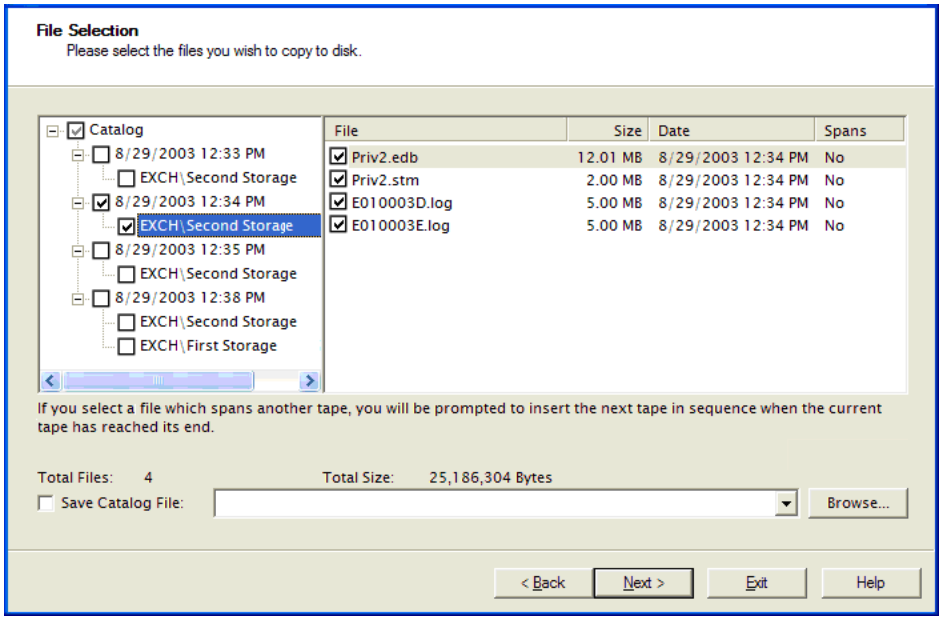
File Selection
Please select the files you wish to copy to disk.
Catalog
8/29/2003 12:33 PM
EXCH\Second Storage
8/29/2003 12:34 PM
EXCH\Second Storage
8/29/2003 12:35 PM
EXCH\Second Storage
8/29/2003 12:38 PM
EXCH\Second Storage
EXCH\First Storage
File
Size
Date
Spans
Priv2.edb 12.01 MB 8/29/2003 12:34 PM No
Priv2.stm 2.00 MB 8/29/2003 12:34 PM No
E010003D.log 5.00 MB 8/29/2003 12:34 PM No
E010003E.log 5.00 MB 8/29/2003 12:34 PM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Total Files: 4
Total Size: 25,186,304 Bytes
Save Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-5. Extracting a full online disk backup (Microsoft NT Backup)

- **Example 2:** Extracting a **Full Online Disk Backup (CA ARCserve Backup)**
  A CA ARCserve backup to disk can contain only one backup set and volume. The backup set lists the session day and time (for example, 8/29/2003 10:32 AM). Each volume lists the machine name and volume name (for example, Exch\First Storage Group).

Copyright © 2011 Kroll Ontrack Inc.

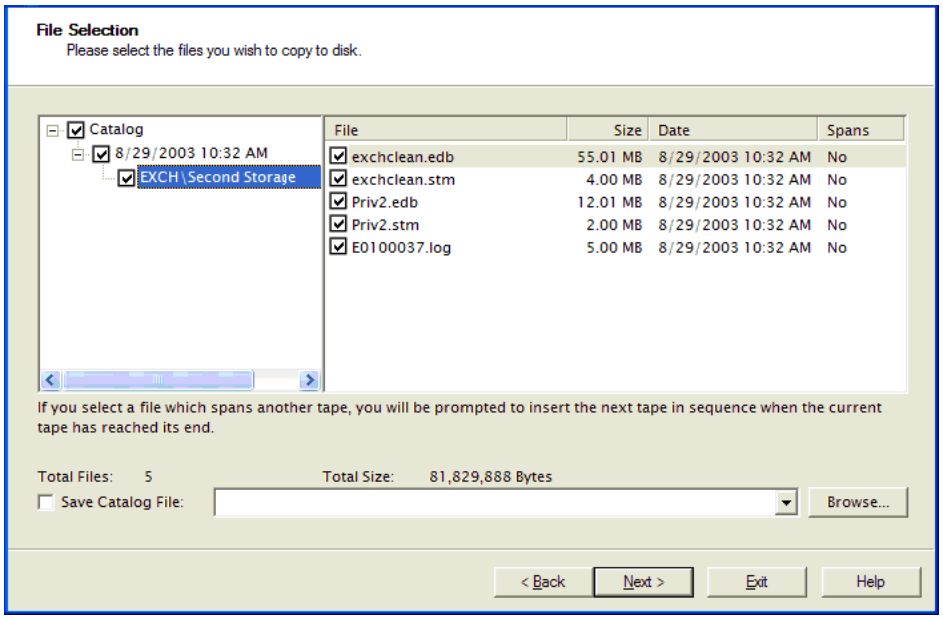
File Selection
Please select the files you wish to copy to disk.
Catalog
8/29/2003 10:32 AM
EXCH\Second Storage
File
Size
Date
Spans
exchclean.edb 55.01 MB 8/29/2003 10:32 AM No
exchclean.stm 4.00 MB 8/29/2003 10:32 AM No
Priv2.edb 12.01 MB 8/29/2003 10:32 AM No
Priv2.stm 2.00 MB 8/29/2003 10:32 AM No
E0100037.log 5.00 MB 8/29/2003 10:32 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Total Files: 5
Total Size: 81,829,888 Bytes
Save Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-6. Extracting a full online disk backup (CA ARCserve Backup)

- **Example 3:** Extracting a **Full Online Tape Backup (EMC NetWorker)**
  An EMC NetWorker backup to tape can contain multiple backup sets and volumes. This example only displays one online backup set. The backup set lists the SSID (for example, 4247758661). The volume lists the machine name and volume name.

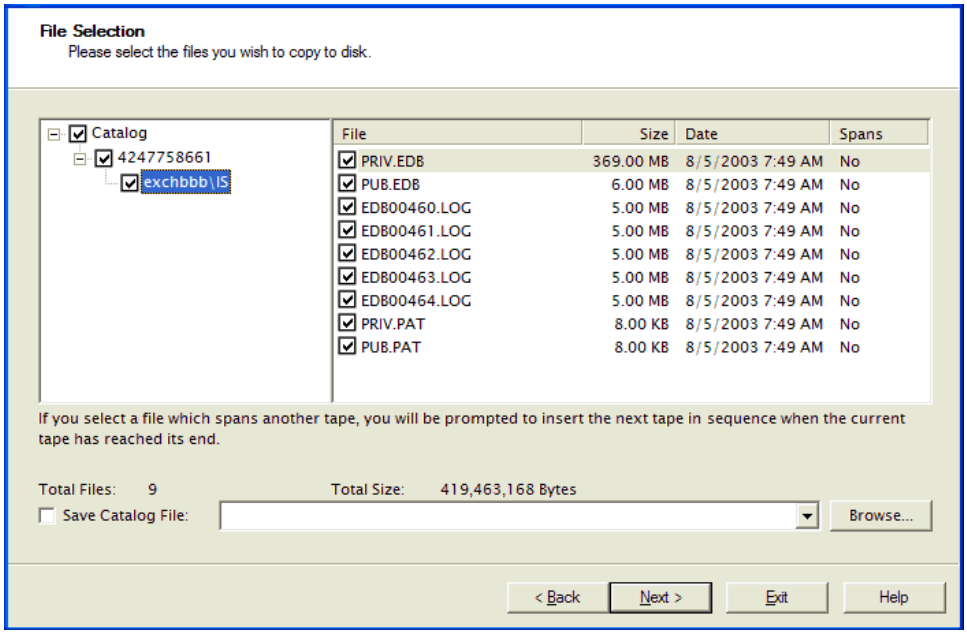
File Selection
Please select the files you wish to copy to disk.
Catalog
4247758661
exchbbb\IS
File
Size
Date
Spans
PRIV.EDB 369.00 MB 8/5/2003 7:49 AM No
PUB.EDB 6.00 MB 8/5/2003 7:49 AM No
EDB00460.LOG 5.00 MB 8/5/2003 7:49 AM No
EDB00461.LOG 5.00 MB 8/5/2003 7:49 AM No
EDB00462.LOG 5.00 MB 8/5/2003 7:49 AM No
EDB00463.LOG 5.00 MB 8/5/2003 7:49 AM No
EDB00464.LOG 5.00 MB 8/5/2003 7:49 AM No
PRIV.PAT 8.00 KB 8/5/2003 7:49 AM No
PUB.PAT 8.00 KB 8/5/2003 7:49 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Total Files: 9
Total Size: 419,463,168 Bytes
Save Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-7. Extracting a full online tape backup (EMC NetWorker)

- **Example 4:** Extracting a **Full Online Tape Backup (NetBackup)**
  A NetBackup to tape can contain multiple backup sets and volumes. This example only displays one online backup set. Each backup set lists the session day and time (for example,

Copyright © 2011 Kroll Ontrack Inc.

11/17/2005 3:42 PM). Each volume lists the machine name. Online backups also include the volume name (for example, pc\First Storage Group).

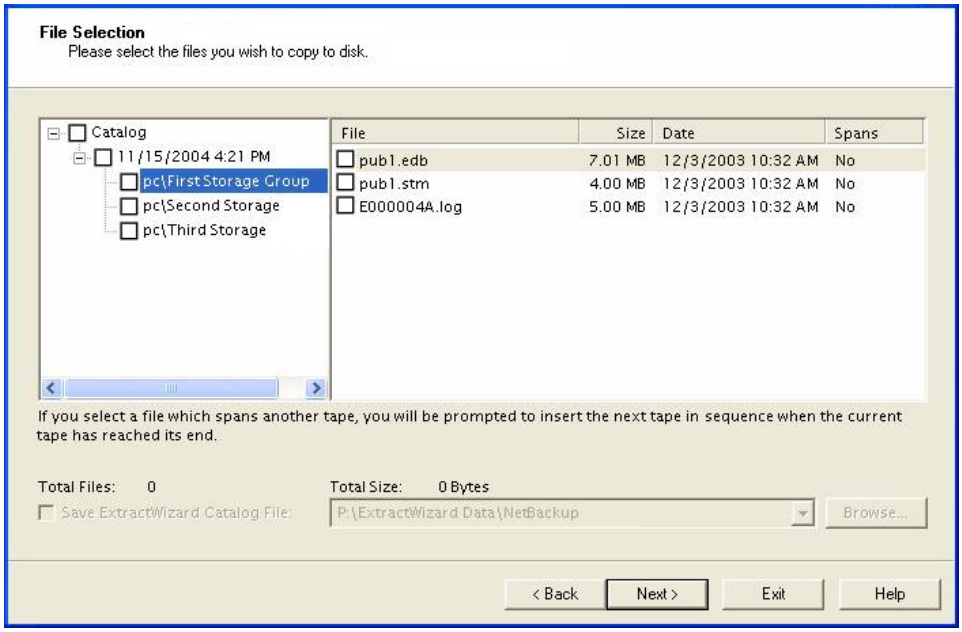

Figure 1-8. Extracting a full online tape backup (NetBackup)

- **Example 5:** Extracting a **Full Online Tape Backup (Native SharePoint Backup)**
  A Native SharePoint Backup to tape can contain multiple backup sets and volumes. This example displays two online backup sets. Each backup set lists the session day and time (for example, 4/20/2008 12:49 PM). Each volume lists the machine name.

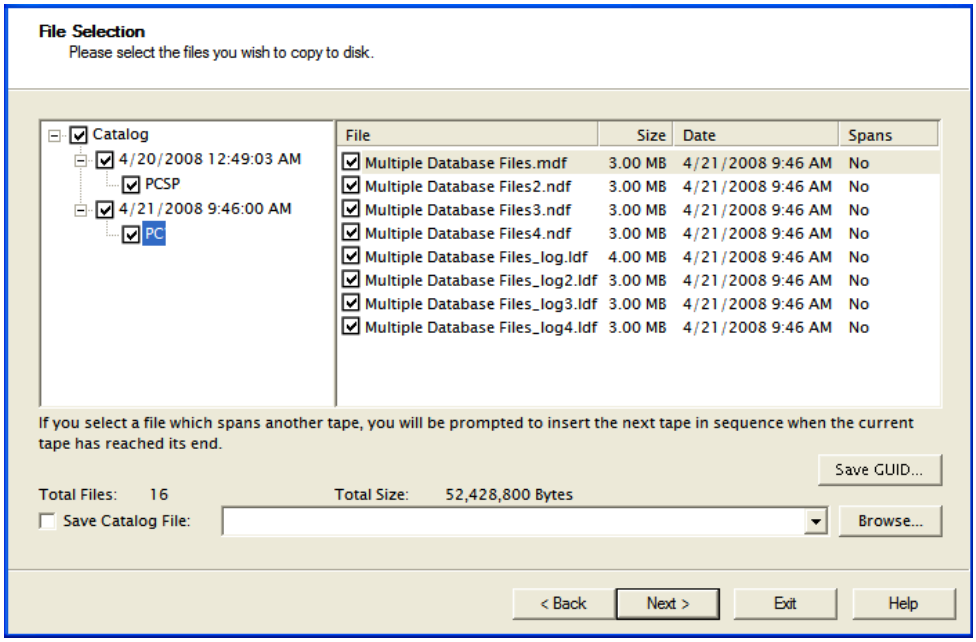

Figure 1-9. Extracting a full online tape backup (Native SharePoint Backup)

Copyright © 2011 Kroll Ontrack Inc.

To extract the last full online and every incremental backup

- On the **File Selection** page of the Ontrack PowerControls ExtractWizard, select all of the files (for example, .edb, .log, .stm, .pat) from the last full online (normal) backup, plus the .log files from every incremental backup.

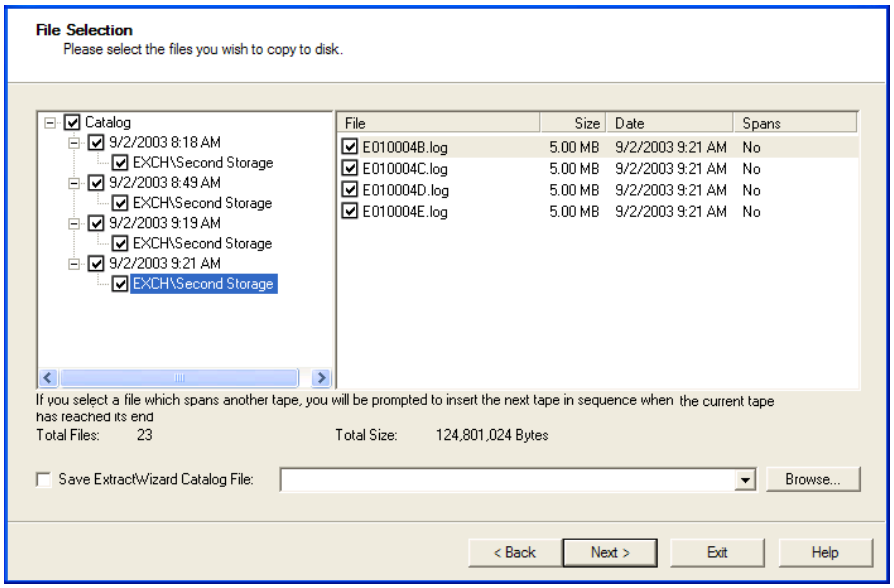
File Selection
Please select the files you wish to copy to disk.
Catalog
9/2/2003 8:18 AM
EXCH\Second Storage
9/2/2003 8:49 AM
EXCH\Second Storage
9/2/2003 9:19 AM
EXCH\Second Storage
9/2/2003 9:21 AM
EXCH\Second Storage
File
Size
Date
Spans
E010004B.log 5.00 MB 9/2/2003 9:21 AM No
E010004C.log 5.00 MB 9/2/2003 9:21 AM No
E010004D.log 5.00 MB 9/2/2003 9:21 AM No
E010004E.log 5.00 MB 9/2/2003 9:21 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end
Total Files: 23
Total Size: 124,801,024 Bytes
Save ExtractWizard Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-10. Extracting the full online plus every incremental backup to disk (Microsoft NT Backup)

To extract the last full online and last differential backup

- On the **File Selection** page of the Ontrack PowerControls ExtractWizard, select all of the files (for example, .edb, .log, .stm, .pat) from the last full online (normal) backup, plus the .log files from the last differential backup.

Copyright © 2011 Kroll Ontrack Inc.

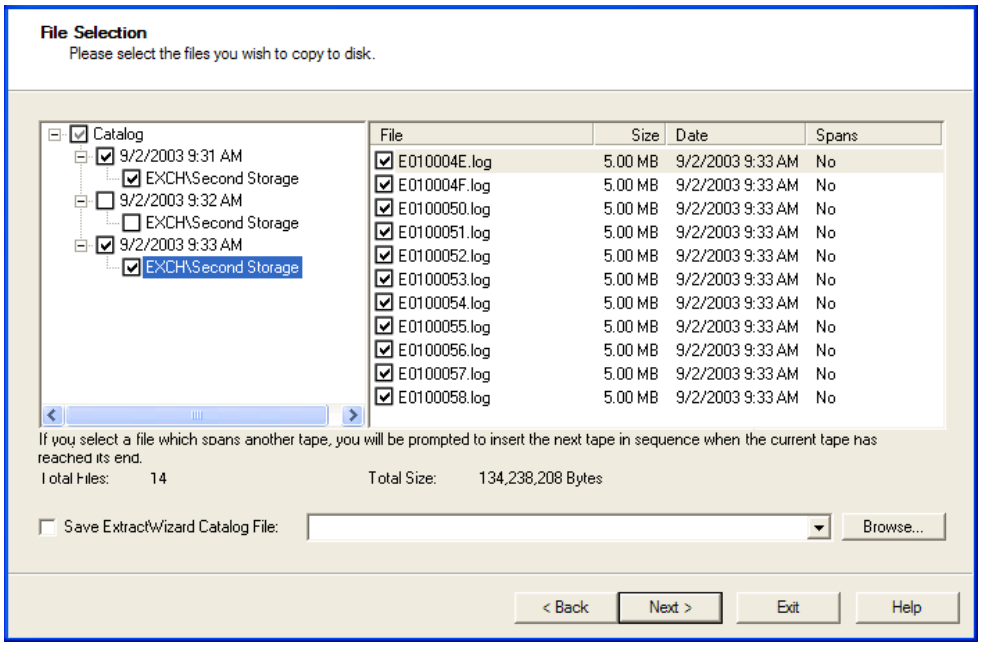
File Selection
Please select the files you wish to copy to disk.
Catalog
9/2/2003 9:31 AM
EXCH\Second Storage
9/2/2003 9:32 AM
EXCH\Second Storage
9/2/2003 9:33 AM
EXCH\Second Storage
File
Size
Date
Spans
E010004E.log 5.00 MB 9/2/2003 9:33 AM No
E010004F.log 5.00 MB 9/2/2003 9:33 AM No
E0100050.log 5.00 MB 9/2/2003 9:33 AM No
E0100051.log 5.00 MB 9/2/2003 9:33 AM No
E0100052.log 5.00 MB 9/2/2003 9:33 AM No
E0100053.log 5.00 MB 9/2/2003 9:33 AM No
E0100054.log 5.00 MB 9/2/2003 9:33 AM No
E0100055.log 5.00 MB 9/2/2003 9:33 AM No
E0100056.log 5.00 MB 9/2/2003 9:33 AM No
E0100057.log 5.00 MB 9/2/2003 9:33 AM No
E0100058.log 5.00 MB 9/2/2003 9:33 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Total Files: 14
Total Size: 134,238,208 Bytes
Save ExtractWizard Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-11. Extracting the last normal plus the last differential backup to disk (Microsoft NT Backup)

To extract an online copy backup (plus every incremental or last differential)

Use the same procedure for extracting a copy backup as you do for extracting a full online backup. A copy backup also works the same as a full online backup when extracting a copy backup plus every incremental or last differential backup.

Note: *The only difference between a full online backup and a copy backup is the following: For a full online backup, the .log files are truncated. For a copy backup, the .log files are not truncated.*

ABOUT EXTRACTING A FULL OFFLINE BACKUP

The Ontrack PowerControls ExtractWizard works the same for an offline backup as it does for an online backup. There are four differences between an offline backup and an online backup:

1. For an offline backup, you need to extract the .edb and .stm files. To ensure that all email data is recovered, you should also include all .log files, as well as .pat and .chk files if they exist. Ontrack PowerControls performs its own verification process and will include the .log, .pat, and .chk files to determine if it needs them to recover the data.
2. An offline backup can contain a .chk file.
3. The name of the volume for an offline backup displays the drive letter.
4. The volume for an offline backup extracts the full path for the Information Store files.

To extract a full offline backup

- On the **File Selection** page of the Ontrack PowerControls ExtractWizard, select the .edb and .stm files. To ensure that all email data is recovered, you should also select .log files, as well as .pat and .chk files if they exist.

Copyright © 2011 Kroll Ontrack Inc.

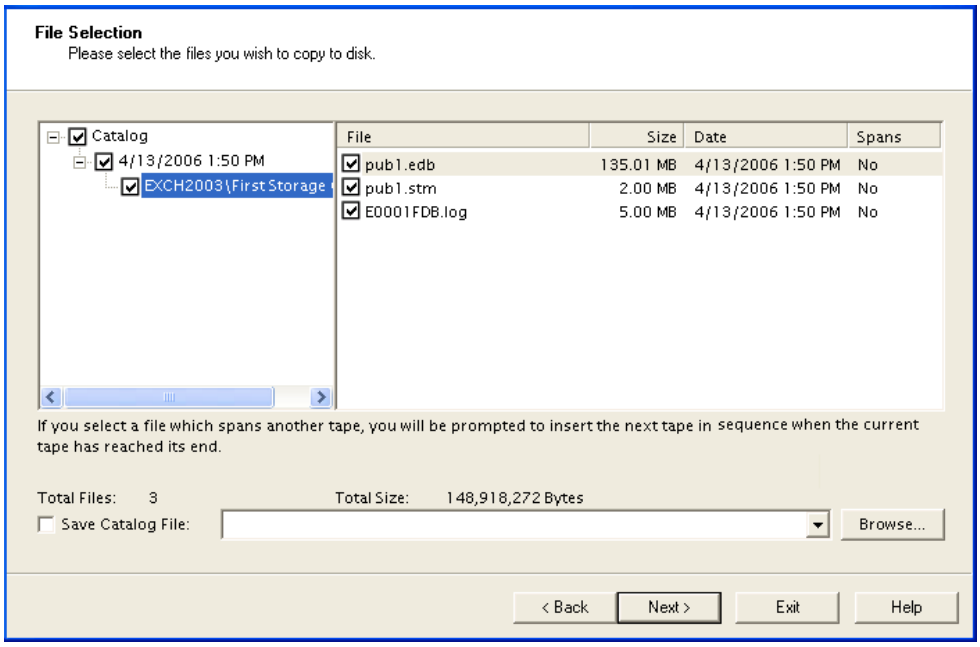

Figure 1-12. Extracting a full offline disk backup (Microsoft NT Backup)

About Extracting a Backup from Exchange Server 5.5 vs. Exchange Server 2000/2003/2007/2010

Extracting data from Exchange Server 5.5 works the same way as extracting data from Exchange Server 2000/2003/2007/2010. However, when you are selecting files to extract on the **File Selection** page of the Ontrack PowerControls ExtractWizard, you will notice two differences:

- Exchange Server 5.5 through Exchange Server 2000 (SP1) contain .pat (patch) files in their information stores, whereas Exchange Server 2000 (SP2) and later do not contain .pat files in their information stores.

  In Exchange Server 5.5 through Exchange Server 2000 (SP1), the .pat files are used to record information on page splits. In Exchange Server 2000 (SP2) and later, the functionality provided by .pat files is incorporated into Exchange log files.
- Exchange Server 2000/2003 information stores contain .stm files in addition to the .edb files. Exchange Server 5.5, Exchange Server 2007, and Exchange 2010 do not contain .stm files.

Using the “Show Duplicates” Option for CommVault Galaxy Backup & Recovery

Ontrack PowerControls ExtractWizard has a “Show Duplicates” check box for CommVault users. Duplicates can occur when CommVault Backup fails and restarts. You can select this check box, and if duplicates exist, they will appear on the right side of the Ontrack PowerControls ExtractWizard window. If Ontrack PowerControls ExtractWizard or Ontrack PowerControls encounters a problem with a file, you can then attempt to extract its duplicate. This feature saves time by allowing you to extract only that file (i.e., its duplicate) which encountered the problem, instead of performing a full extraction of all of the files in the session.

To use the “Show Duplicates” Option for CommVault Galaxy Backup & Recovery

1. Select the **Show Duplicates** check box. If duplicates exist, they will appear on the right side of the Ontrack PowerControls ExtractWizard window.

Copyright © 2011 Kroll Ontrack Inc.

2. Select the duplicate(s) of the file(s) that encountered problems in Ontrack PowerControls ExtractWizard or Ontrack PowerControls, and click **Next**.
3. Complete the remaining steps of the Ontrack PowerControls ExtractWizard.

STEP 3: SAVING A CATALOG FILE

The catalog file saves all the information that Ontrack PowerControls ExtractWizard needs to extract from a backup disk or tape. Saving a catalog file means that the next time you extract from that tape or backup disk, you can skip the catalog process.

To save a Catalog File

1. On the **File Selection** page of the Ontrack PowerControls ExtractWizard, select the files you want to extract, and then select the **Save Ontrack PowerControls ExtractWizard Catalog File** check box.
2. Browse to the desired location, type a file name, and click **Save**. Note that the catalog file is not saved until you click **Next**.

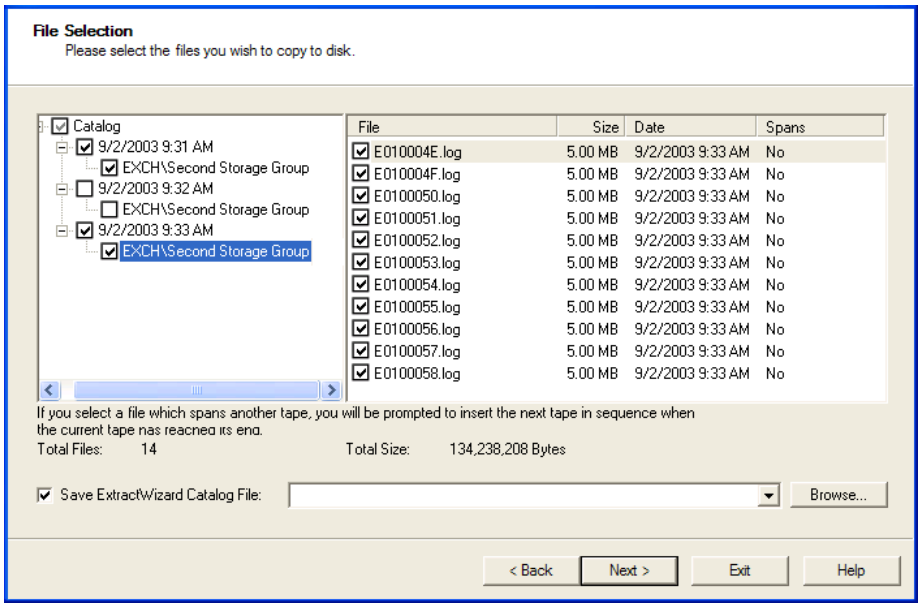
File Selection
Please select the files you wish to copy to disk.
Catalog
9/2/2003 9:31 AM
EXCH\Second Storage Group
9/2/2003 9:32 AM
EXCH\Second Storage Group
9/2/2003 9:33 AM
EXCH\Second Storage Group
File
Size
Date
Spans
E010004E.log 5.00 MB 9/2/2003 9:33 AM No
E010004F.log 5.00 MB 9/2/2003 9:33 AM No
E0100050.log 5.00 MB 9/2/2003 9:33 AM No
E0100051.log 5.00 MB 9/2/2003 9:33 AM No
E0100052.log 5.00 MB 9/2/2003 9:33 AM No
E0100053.log 5.00 MB 9/2/2003 9:33 AM No
E0100054.log 5.00 MB 9/2/2003 9:33 AM No
E0100055.log 5.00 MB 9/2/2003 9:33 AM No
E0100056.log 5.00 MB 9/2/2003 9:33 AM No
E0100057.log 5.00 MB 9/2/2003 9:33 AM No
E0100058.log 5.00 MB 9/2/2003 9:33 AM No
If you select a file which spans another tape, you will be prompted to insert the next tape in sequence when the current tape has reached its end.
Total Files: 14
Total Size: 134,238,208 Bytes
Save ExtractWizard Catalog File:
Browse...
< Back
Next >
Exit
Help

Figure 1-13. Saving a Catalog File

STEP 4: COMPLETING THE FILE SELECTION

On the **File Selection** page of the Ontrack PowerControls ExtractWizard, make sure you have selected the files that you want to extract, and saved the Ontrack PowerControls ExtractWizard catalog file, if desired. Then click **Next** to proceed to the last page of the wizard.

Destination Folder

Use the Destination Folder page of the wizard to specify a location for the extracted data.

1. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, type the path where you want Ontrack PowerControls ExtractWizard to extract the data, use the history drop-down menu, or browse to the desired location and type the file name. (The

Copyright © 2011 Kroll Ontrack Inc.

Browse window lets you create a new folder on the Target volume, unless you are running Windows NT 4).

2. Click **Next**. The Ontrack PowerControls ExtractWizard verifies that you have enough disk space as well as access rights to create files and directories.

Copy Progress

The **Copy Progress** page of the Ontrack PowerControls ExtractWizard shows the progress of the Ontrack PowerControls ExtractWizard extracting the data to the destination folder. This process may take some time.

The top bar indicates the progress for the file that is currently being extracted. The bottom bar indicates the progress for all of the files. For EMC NetWorker and NetBackup tapes, the top bar may switch back and forth between files if they are interleaved.

During file extraction, Ontrack PowerControls ExtractWizard can be in one of four states: *initializing*, *reading* (processing one block at a time), *scanning* (seeking ahead multiple blocks), and *rewinding*.

Note: *You can click* ***Cancel*** *to stop the process. The file currently being extracted will be deleted, but you can access any files that have completed extraction.*

Completing the Wizard

The last page of the Ontrack PowerControls ExtractWizard displays all of the files that were successfully extracted. If you are satisfied with the results, click **Finish**.

If you extracted multiple data sets, see “Organizing the Extracted Files for Ontrack PowerControls” on page 24.

Copyright © 2011 Kroll Ontrack Inc.

Organizing the Extracted Files for Ontrack PowerControls

Your online extracted files for Exchange and SharePoint can be organized for better results.

Ontrack PowerControls ExtractWizard for Exchange

For best results when using an online incremental or differential backup:

- Put the .edb, .stm, and .pat files in one directory.
- Put the associated log files (for example, .log, .chk) in one directory.

Note: *The two directories can be different.*

Ontrack PowerControls does not require .stm or .log files, but you should include them to ensure that all email data is recovered. You may get corruption errors if these files are not present. In other words, the quality of the recovery is better if you include the .stm and log files.

If you are using an offline backup

You need to use the .edb and .stm files. To ensure that all email data is recovered, you should also include all .log files, as well as .pat and .chk files if they exist. Ontrack PowerControls performs its own verification process and will include the .log and .pat files to determine if it needs them to recover the data.

Note: *Exchange Server 5.5, Exchange Server 2007, and Exchange Server 2010 do not use .stm files.*

Ontrack PowerControls ExtractWizard for SharePoint

For best results when using an online Native SharePoint Backup:

- Put the .mdf, .ldf, and any .ndf files in the same directory.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 2

USING THE ONTRACK POWERCONTROLS EXTRACTWIZARD ADVANCED METHOD

Overview

The Ontrack PowerControls ExtractWizard Advanced Method uses your existing backup software to extract an Exchange database from a backup server or tape library, across the network, to the computer running Ontrack PowerControls ExtractWizard. The Advanced Method takes full advantage of your backup software's knowledge of individual set locations and robotic library support. This is the fastest method to extract an Exchange Information Store from the most recent backups managed by your backup server.

Once configured for the Advanced Method, Ontrack PowerControls ExtractWizard seamlessly integrates with your backup software and fully supports your existing catalogs, backups, and tape library. No other changes to your existing backup architecture or settings are required.

Note: *For information on using the* ***Direct Method*** *of extracting backed-up Exchange or SharePoint data, see* *"Using the Ontrack PowerControls ExtractWizard Direct Method" on page 9.*

Two Modes of Operation

The Ontrack PowerControls ExtractWizard Advanced Method offers you two choices, API Method and Exchange Emulation.

API Method

With this method, Ontrack PowerControls ExtractWizard communicates directly with the backup software server through methods provided by the client side .dll files. For more information, see "Using the API Method" on page 27. The API method is used for these types of backup software:

- IBM Tivoli Storage Manager — see "Using the API Method for IBM Tivoli Storage Manager" on page 27
- EMC NetWorker — see "Using the API Method for EMC NetWorker" on page 31

Copyright © 2011 Kroll Ontrack Inc.

Exchange Emulation

With this method, Ontrack PowerControls ExtractWizard appears as an Exchange Server to the backup software. You run the backup software and extract the Exchange data to the computer running Ontrack PowerControls ExtractWizard. For more information, see “Organizing the Extracted Files for Ontrack PowerControls” on page 24. The Exchange Emulation method is used for these types of backup software:

- Microsoft NT Backup — see “Using the Exchange Emulation Method - Windows NT Backup” on page 41
- HP OpenView Storage Data Protector — see “Using the Exchange Emulation Method - HP OpenView Storage Data Protector” on page 51
- Symantec Backup Exec — see “Using the Exchange Emulation Method - Symantec Backup Exec” on page 61
- NetBackup — see “Using the Exchange Emulation Method - NetBackup” on page 101
- CA ARCserve Backup — see “Using the Exchange Emulation Method - CA ARCserve Backup” on page 91
- CommVault Galaxy Backup & Recovery — see “Using the Exchange Emulation Method - CommVault Galaxy Backup & Recovery” on page 121
- UltraBac — see “Using the Exchange Emulation Method - UltraBac” on page 135

Requirements for Using the Ontrack PowerControls ExtractWizard Advanced Method

The API and Exchange Emulation advanced methods share two main requirements:

- Only online Exchange backups are supported. This includes full, copy, incremental, and differential backups.
- The backup client software must be installed on the computer running Ontrack PowerControls ExtractWizard.

Note: *The Exchange Emulation method has additional requirements. For more information, see “Using the Exchange Emulation Method” on page 37.*

Copyright © 2011 Kroll Ontrack Inc.

Using the API Method

The API method of extracting backed-up Exchange data allows Ontrack PowerControls ExtractWizard to communicate directly to the backup software server. Ontrack PowerControls ExtractWizard queries the backup server for online Exchange backups using the backup software's API (Application Program Interface). You then select which backups you want extracted and Ontrack PowerControls ExtractWizard will extract the databases to the desired location on disk.

The API method is used for two types of backup software:

- Using the API Method for IBM Tivoli Storage Manager
- Using the API Method for EMC NetWorker

Using the API Method for IBM Tivoli Storage Manager

Use the following steps to use the API Method for IBM Tivoli Storage Manager.

1. Install the IBM Tivoli client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Start Ontrack PowerControls ExtractWizard. Click **Start**, and then point to **Programs**. Point to **Kroll Ontrack**, point to **Ontrack PowerControls**, and then click **Ontrack® PowerControls™ ExtractWizard**. The first page describes the wizard.
3. (Optional) To change the location of the license file, click **About** and then click **License Info**. Under **License File Name**, specify a new location.

   The license file controls which Ontrack PowerControls ExtractWizard agents are active. For more information, see "Enabling the Licensed Agents" on page 4.
4. Click **Next**.

   The **Method of Extraction** page of the Ontrack PowerControls ExtractWizard offers two methods of extracting backed-up Exchange data. For more information on these two methods, see "Method of Extraction" on page 10.
5. Select the **Advanced Method** option.

Copyright © 2011 Kroll Ontrack Inc.

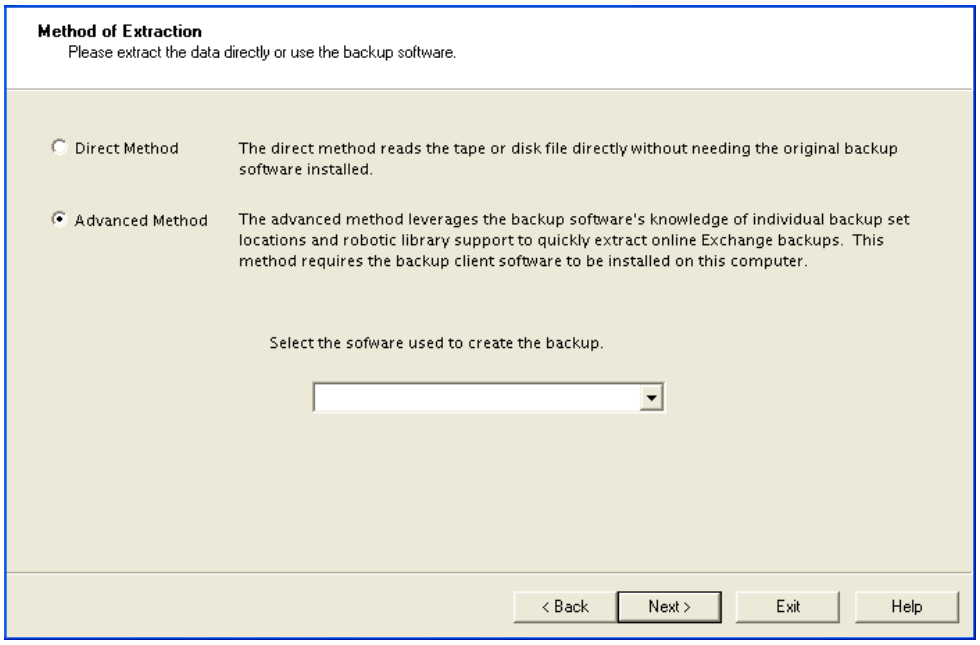
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 2-1. Method of Extraction Page for Advanced Method

6. Select **IBM Tivoli Storage Manager** from the drop-down menu.
7. Click **Next**. The **Connection Parameters** page of the Ontrack PowerControls ExtractWizard lets you specify the backup server and client computer names.

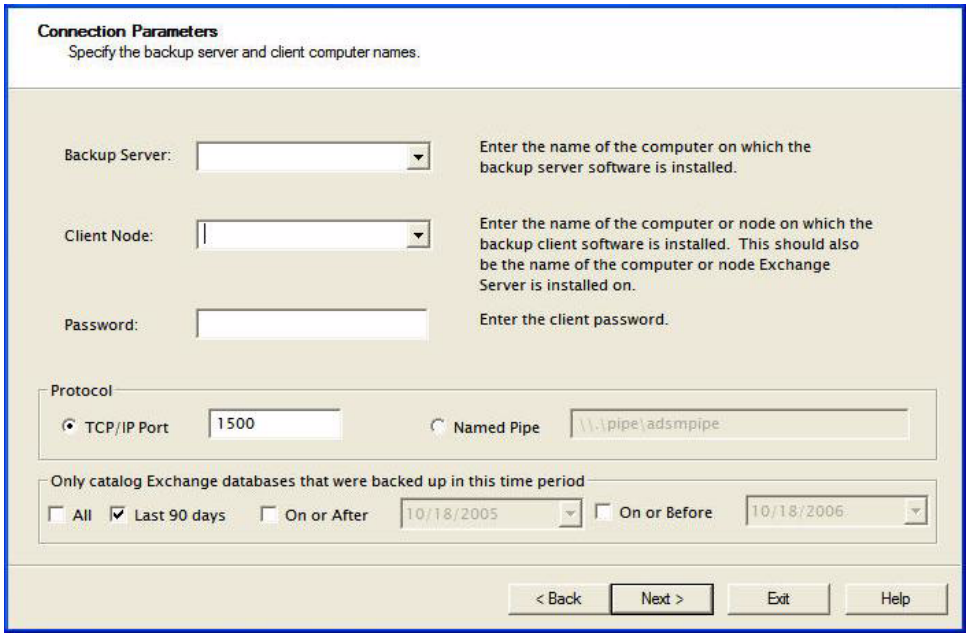
Connection Parameters
Specify the backup server and client computer names.
Backup Server:
Enter the name of the computer on which the backup server software is installed.
Client Node:
Enter the name of the computer or node on which the backup client software is installed. This should also be the name of the computer or node Exchange Server is installed on.
Password:
Enter the client password.
Protocol
TCP/IP Port
1500
Named Pipe
\\.\pipe\adsmpipe
Only catalog Exchange databases that were backed up in this time period
All
Last 90 days
On or After
10/18/2005
On or Before
10/18/2006
< Back
Next >
Exit
Help

Figure 2-2. Connection parameters for NT Backup

8. Specify the connection parameters:

Copyright © 2011 Kroll Ontrack Inc.

- For **Backup Server**, enter the name of the computer on which the backup server software is installed.
- For **Client Node**, enter the IBM Tivoli client node that backed up the Exchange Information Store.
- For **Password**, enter the client password.
- For **Protocol**, select one of the following options:

  ==>**TCP/IP Port:** Refer to your IBM Tivoli Storage Manager user guide or help for instructions.

  ==>**Named Pipe:** Refer to your IBM Tivoli Storage Manager user guide or help for instructions.
- For **Only catalog Exchange databases that were backed up in this time period**, select the desired time period.

Note: *The **Catalog Progress** page of the Ontrack PowerControls ExtractWizard shows the catalog progress. The Ontrack PowerControls ExtractWizard queries the Tivoli backup server database for Information Store backups.*

9. Do one of the following:
   - Click **Cancel** if you want to stop the catalog process. If you click **Cancel**, the Ontrack PowerControls ExtractWizard catalog will display all files that it found to that point.
   - When the catalog is completed, click **Next** to proceed to the next page of the Ontrack PowerControls ExtractWizard.

   The **File Selection** page of the Ontrack PowerControls ExtractWizard lets you select both the private and public Exchange Information Store files that you want to extract from an Exchange backup.

   In the following example, IBM Tivoli Storage Manager contains multiple backup sets and volumes. Each backup set lists the session day and time (for example, Feb 08 14:01:29 2005). Each volume lists the computer name and volume name. The objects belonging to the volume appear on the right side of the window. One object contains the log files, and the other object contains the .edb and .stm files.

   Note: *An asterisk (*) next to a backup indicates that it is an incremental or differential backup.*

Copyright © 2011 Kroll Ontrack Inc.

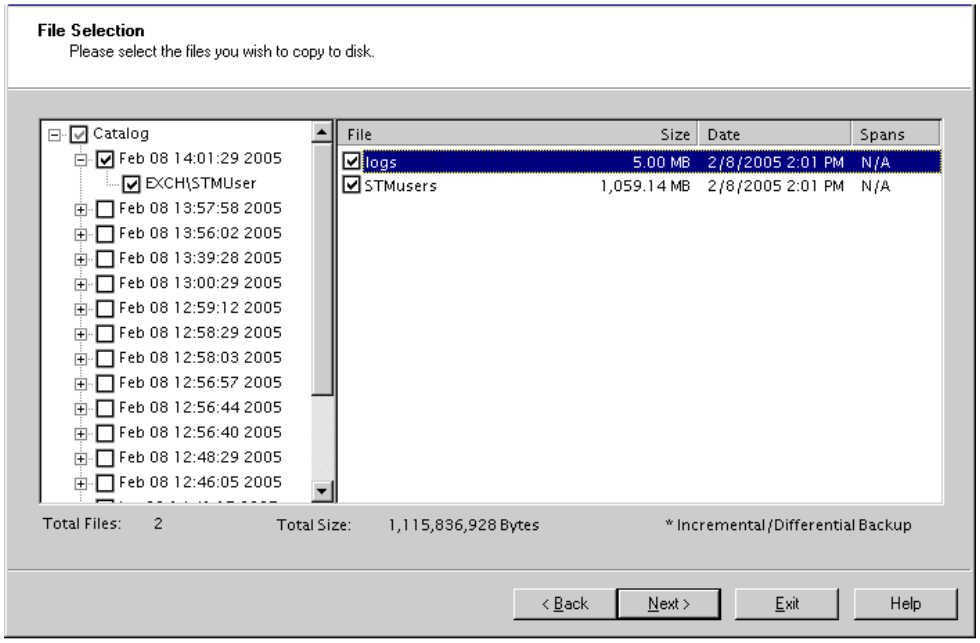

Figure 2-3. Extracting a full online disk backup (IBM Tivoli Storage Manager)

10. On the left side of the window, click the plus sign (+) next to a backup set to view its volumes.
11. Select a volume (select its name, not its check box) to display the Exchange Information Store objects on the right side of the window.
12. Select the check boxes next to the objects containing the .log, .edb, and .stm files, as well as .pat files, if they exist.
13. Click **Next**. The **Destination Folder** page of the Ontrack PowerControls ExtractWizard lets you select a folder for the extracted files.
14. Under **Destination Folder**, specify a location for the extracted files.
15. Click **Next**. The Ontrack PowerControls ExtractWizard verifies that you have enough disk space as well as access rights to create files and directories, and then begins to extract the Exchange Information Store files you have selected.

    The **Copy Progress** page of the Ontrack PowerControls ExtractWizard shows the progress of the Ontrack PowerControls ExtractWizard extracting the Exchange Information Store data to the destination folder. This process may take some time.
16. (Optional) Click **Cancel** only if you want to stop the process. The file currently being extracted will be deleted, but you can access any files that have completed extraction.

    The last page of the Ontrack PowerControls ExtractWizard displays all of the files that were successfully extracted.
17. If you are satisfied with the results, click **Finish**.
18. If you extracted multiple data sets, see “Organizing the Extracted Files for Ontrack PowerControls” on page 24.

Copyright © 2011 Kroll Ontrack Inc.

Using the API Method for EMC NetWorker

Before you use the API Method for EMC NetWorker, you must do the following:

- Make sure your login has EMC NetWorker administrative rights to get correct sizes for Exchange files. (The user's administrative rights are accessed from the Setup tab on the NetWorker Management Console.) If you do not have these rights, you can still run Ontrack PowerControls ExtractWizard, but you will not be provided accurate extraction progress.

Using EMC NetWorker 7.3 and older

Make sure your current login has remote access to the client to which you are restoring.

To gain remote access

1. Run NetWorker Administrator.
2. Select **Manage Clients**.
3. Right-click the Exchange client you want to restore the database from and click **Edit**.
4. Under the **Remote** tab, enter your full user name in the **Remote Access** box. Example: postmaster@powercontrols.com

Using EMC NetWorker 7.4 and 7.5

Make sure your current login has remote access to the client to which you are restoring.

To gain remote access

1. Run NetWorker Administrator.
2. Select **Manage Clients**.
3. Right-click the Exchange client you want to restore the database from and click **Edit**.
4. In the client **Properties**, click the **Globals (1 of 2)** tab. Add the machine name that will be running Ontrack PowerControls ExtractWizard in the **Aliases** field for the client.

Using EMC NetWorker 7.6

Make sure your current login has remote access to the client to which you are restoring.

Note: *The computer running Ontrack PowerControls Extract Wizard is the "Extractor" machine.*

To gain remote access

1. Run NetWorker Administrator.
2. Select the **Configuration** tab.
3. In the tree view of the left pane, click **Clients**.
4. In the Clients pane, right-click the EMC NetWorker client that backed up the Exchange Information Store and select **Properties**.
5. In the Properties dialog box, select the **Globals (1 of 2)** tab.
6. In the **Aliases** box, enter the name of the Extractor machine *both with and without the domain name* (example: `computername.domain.com` and `computername`).
7. Click **Ok**.
8. In the tree view of the left pane, select **User Group**.
9. In the User Group pane, right-click **Users** and select **Properties**.

Copyright © 2011 Kroll Ontrack Inc.

10. In the Properties dialog box, select the **General** tab.
11. In the **Privileges** list, ensure the following entries are selected:
    - Operate NetWorker
    - Monitor NetWorker
    - Operate Devices
    - Recover Local Data
    - Backup Local Data.

    Note: *If you want to extract data as a client that is not aliased, select* ***Remote Access All Clients****.*
12. Click **Ok**.
13. Reboot the server or stop and start all EMC and NetWorker services by doing the following:

    Caution: *Before restarting all the EMC and NetWorker services, ensure that there are no active NetWorker backup or restore operations running on this system.*

    - Click the **Start** menu, then select **Run** to open the Run dialog box.
    - In the **Open** box, type **services.msc** and press Enter to open the Services Management console.
    - Select the **NetWorker Remote Exec Service** service. *If the service is already running*, click **Restart the service**. *If the service is not running*. click **Start the service**.
    - After starting or restarting **NetWorker Remote Exec Service**, verify that **Started** appears in its Status column.
    - Now start the **NetWorker Backup and Recover Server** service and verify that **Started** appears in its Status column.
    - Finally, start the **EMC GST Service** service and verify that **Started** appears in its Status column.

    Note: *You can also start and stop all EMC and NetWorker services from the command line on the Network Server, as shown in the following example (quotation marks in highlighted commands are required).*

Copyright © 2011 Kroll Ontrack Inc.

```
C:\Documents and Settings\Administrator>net stop "NetWorker Remote Exec Service"
The following services are dependent on the NetWorker Remote Exec Service service.
Stopping the NetWorker Remote Exec Service service will also stop these services.

   NetWorker Backup and Recover Server
   EMC GST Service
Do you want to continue this operation? (Y/N) [N]: y
.................
The NetWorker Backup and Recover Server service was stopped successfully.
....
The EMC GST Service service was stopped successfully.
.
The NetWorker Remote Exec Service service was stopped successfully.
C:\Documents and Settings\Administrator>net start "NetWorker Remote Exec Service"
The NetWorker Remote Exec Service service is starting..
The NetWorker Remote Exec Service service was started successfully.
C:\Documents and Settings\Administrator>net start "NetWorker Backup and Recover Server"
The NetWorker Backup and Recover Server service is starting.........
The NetWorker Backup and Recover Server service was started successfully.
C:\Documents and Settings\Administrator>net start "EMC GST Service"
The EMC GST Service service is starting.
The EMC GST Service service was started successfully.
C:\Documents and Settings\Administrator>
```

Figure 2-4. Example of starting and stopping all EMC and NetWorker services from the command line.

To use the API Method for EMC NetWorker

1. Install the EMC NetWorker client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Start Ontrack PowerControls ExtractWizard. (Click **Start**, and then select **Programs** or **All Programs**. Select **Kroll Ontrack**, select **Ontrack PowerControls**, and then select **Ontrack® PowerControls™ ExtractWizard**.)
3. On the first page of the Ontrack PowerControls ExtractWizard, click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

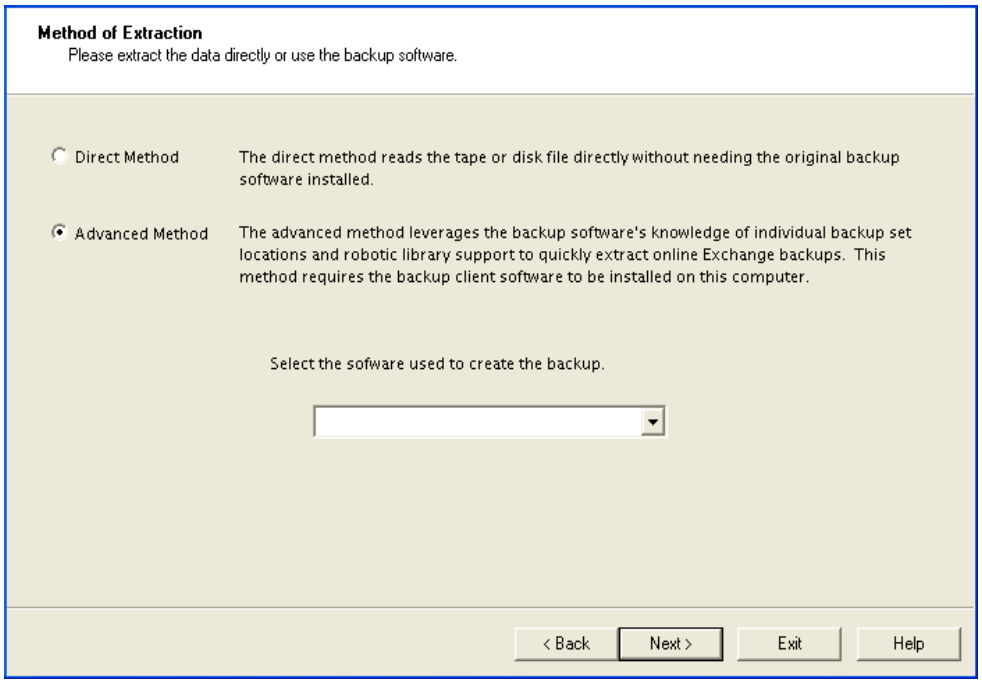
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 2-5. Method of Extraction Page for Advanced Method

5. Select **EMC NetWorker** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, specify the connection parameters:
   - For **Backup Server**, enter the name of the computer on which the backup server software is installed.
   - For **Client**, enter the EMC NetWorker client that backed up the Exchange Information Store.
   - For **Only catalog Exchange databases that were backed up in this time period**, select the desired time period.

   Note: *The **Catalog Progress** page of the Ontrack PowerControls ExtractWizard shows the catalog progress. The Ontrack PowerControls ExtractWizard queries the EMC NetWorker backup server database for Information Store backups.*

7. Do one of the following:
   - Click **Cancel** if you want to stop the catalog process. If you click **Cancel**, the Ontrack PowerControls ExtractWizard catalog will display all files that it found to that point.
   - When the catalog is completed, click **Next** to proceed to the next page of the Ontrack PowerControls ExtractWizard.

   Note: *On the **File Selection** page of the Ontrack PowerControls ExtractWizard you can select from both the private and public Exchange Information Store files that you want to extract from an Exchange backup.*

   - In the following example, EMC NetWorker can contain multiple backup sets and volumes. Each backup set lists the session day and time (for example, Wed Jan 26 14:36:58 2005). Each volume lists the computer name and volume name.

Copyright © 2011 Kroll Ontrack Inc.

Note: *An asterisk (*) next to a backup indicates that it is an incremental or differential backup.*

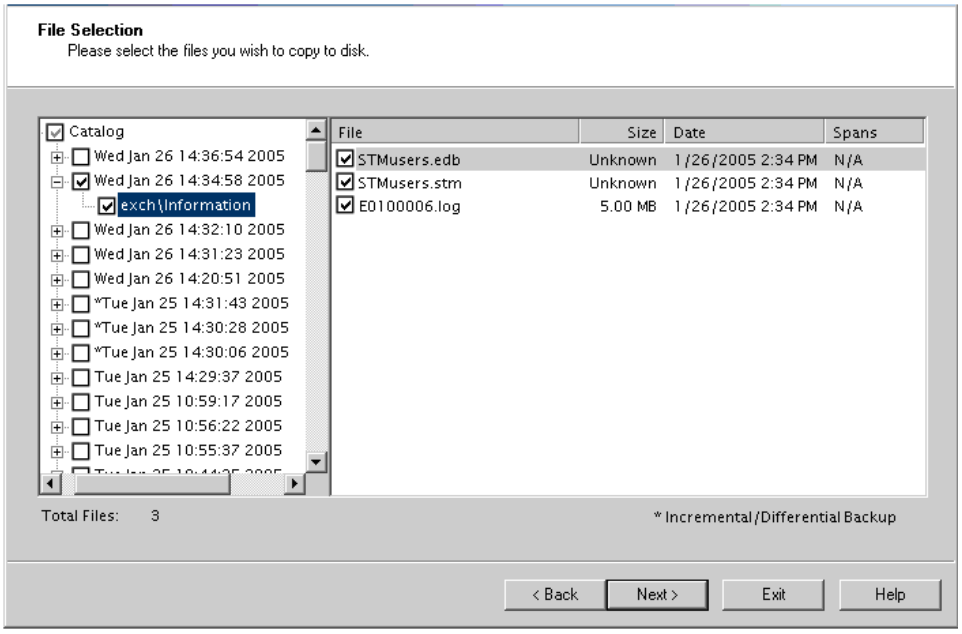

Figure 2-6. Extracting a full online disk backup (EMC NetWorker)

8. In the left pane, click the plus sign (+) next to a backup set to view its volumes.
9. Select a volume (select its name, not its check box) to view the Exchange Information Store objects in the right pane.
10. Select the check boxes next to the .log, .edb, and .stm files, as well as .pat files, if they exist, and then click **Next**.
11. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, use the **Destination Folder** box to specify a location for the extracted files.
12. Click **Next**. The Ontrack PowerControls ExtractWizard verifies that you have enough disk space as well as access rights to create files and directories, and then begins to extract the Exchange Information Store files you have selected.

    The **Copy Progress** page of the Ontrack PowerControls ExtractWizard shows the progress of the Ontrack PowerControls ExtractWizard extracting the Exchange Information Store data to the destination folder. This process may take some time.
13. (Optional) Click **Cancel** only if you want to stop the process. The file currently being extracted will be deleted, but you can access any files that have completed extraction. The last page of the Ontrack PowerControls ExtractWizard displays all of the files that were successfully extracted.
14. If you are satisfied with the results, click **Finish**.

If you extracted multiple data sets, see “Organizing the Extracted Files for Ontrack PowerControls” on page 24.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 3

USING THE EXCHANGE EMULATION METHOD

Overview

The Exchange Emulation method of extracting backed-up Exchange data allows you to run your backup software and restore to the computer running Ontrack PowerControls ExtractWizard, which acts as the alternate Exchange Server. Ontrack PowerControls ExtractWizard responds to the backup software by using the same interfaces that Exchange uses.

Two Basic Steps for Using the Exchange Emulation Method

1. Start Ontrack PowerControls ExtractWizard on the computer where the Exchange Information Store files will be restored. Then configure it for the Advanced Method of Exchange Emulation.
2. Start your backup restore software on the computer you normally run it on, and then perform a redirected online restore to an alternate Exchange Server. The computer running Ontrack PowerControls ExtractWizard acts as the alternate Exchange Server.

Copyright © 2011 Kroll Ontrack Inc.

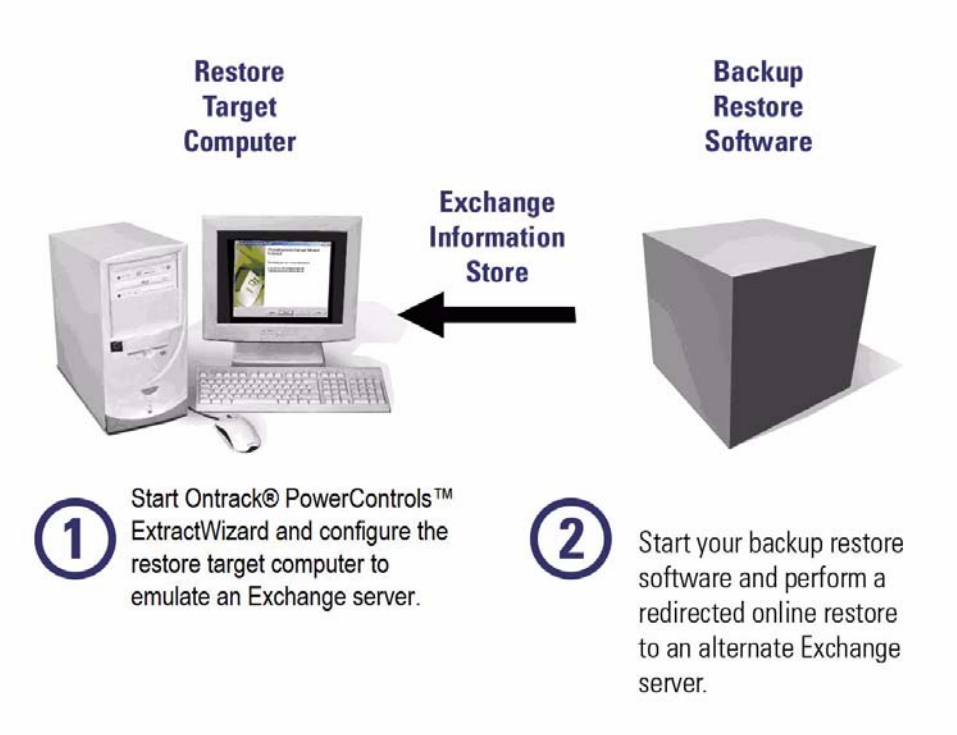

Figure 3-1. The Ontrack PowerControls ExtractWizard Exchange Emulation Method

Terms

- **Restore Target Computer** is the computer running Ontrack PowerControls ExtractWizard, where the Exchange Information Store files will be restored.
- **Backup Restore Software** is the backup software used to initiate the restore. It may be on the same computer running Ontrack PowerControls ExtractWizard.

Note: *For NetBackup, you must run your backup restore software on the computer running Ontrack PowerControls ExtractWizard.*

Requirements for Using the Exchange Emulation Method

The Advanced Method for Exchange Emulation has five requirements:

- Only online Exchange backups are supported. This includes full, copy, incremental, and differential backups.
- The backup client software must be installed on the computer running Ontrack PowerControls ExtractWizard.
- Ontrack PowerControls ExtractWizard cannot be run on an Exchange Server.
- Backup restore .dll files must be in the system path on the computer running Ontrack PowerControls ExtractWizard. For Exchange Server 2000/2003/2007, esebcli2.dll is required as well as a registry key pointing to it. For Exchange Server 5.5, edbbcli.dll is

Copyright © 2011 Kroll Ontrack Inc.

required. For more information, see the instructions for each type of backup software discussed in this section.

- You must have the rights to create and start services on the computer running Ontrack PowerControls ExtractWizard.

Types of Backup Software

The Exchange Emulation method is used for these types of backup software:

- Microsoft NT Backup — see “Using the Exchange Emulation Method - Windows NT Backup” on page 41
- HP OpenView Storage Data Protector — see “Using the Exchange Emulation Method - HP OpenView Storage Data Protector” on page 51
- Symantec Backup Exec — see “Using the Exchange Emulation Method - Symantec Backup Exec” on page 61
- NetBackup — see “Using the Exchange Emulation Method - NetBackup” on page 101
- CA ARCserve Backup — see “Using the Exchange Emulation Method - CA ARCserve Backup” on page 91
- CommVault Galaxy Backup & Recovery — see “Using the Exchange Emulation Method - CommVault Galaxy Backup & Recovery” on page 121
- UltraBac — see “Using the Exchange Emulation Method - UltraBac” on page 135

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 4

USING THE EXCHANGE EMULATION METHOD - WINDOWS NT BACKUP

Overview

In order to run Windows® NT Backup on the computer running Exchange Emulation, NT Backup must be set up to do online Exchange backups. If it is not, follow the instructions in this Microsoft Knowledge Base article:

- XADM: How to Use NT Backup from a Non-Exchange 2000 Computer
  http://support.microsoft.com/?kbid=275876

For information on related topics, refer to these Microsoft Knowledge Base articles:

- XADM: Troubleshooting a Remote Online Backup of Exchange 2000
  http://support.microsoft.com/?kbid=275676
- XADM: Files Needed to Perform Exchange NT Backup on Workstation
  http://support.microsoft.com/?kbid=181445

Exchange Emulation for NT Backup: Exchange Server 2000/2003/2007 on Windows 2000, Windows XP, and Windows Server 2003

Use the following steps for performing Exchange emulation for NT Backup with Exchange Server 2000/2003/2007 on Windows 2000, Windows XP, and Windows Server 2003:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

Copyright © 2011 Kroll Ontrack Inc.

Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

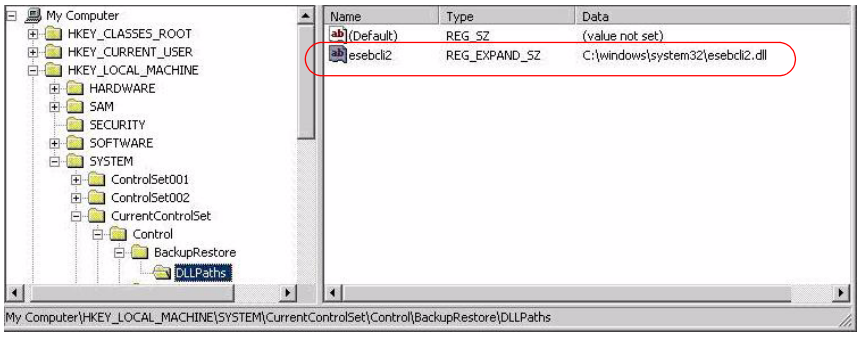

Figure 4-1. Example of Setting the Registry Key

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

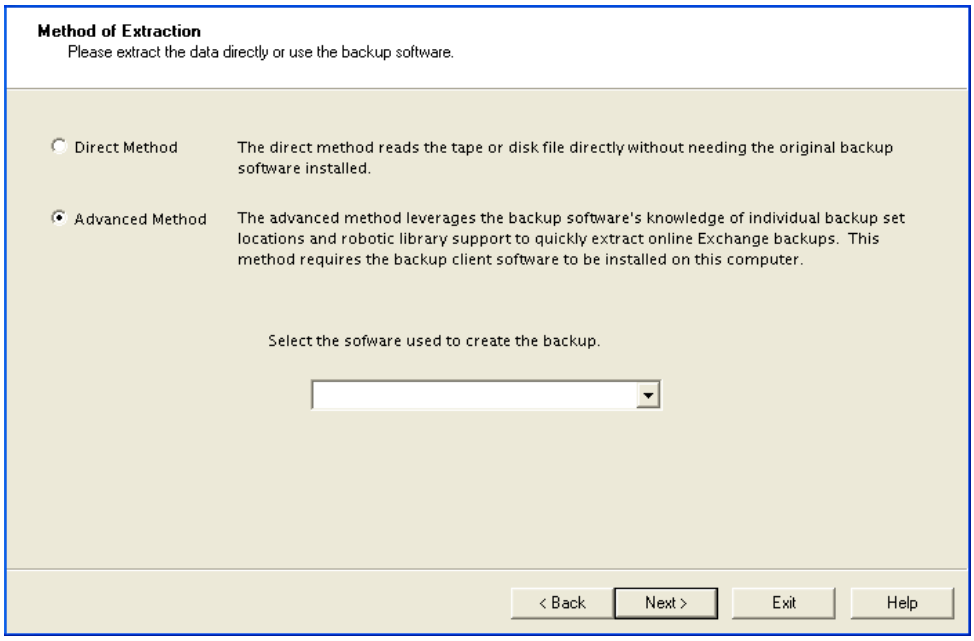
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 4-2. Method of Extraction Page for Advanced Method

5. Select **NT Backup** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

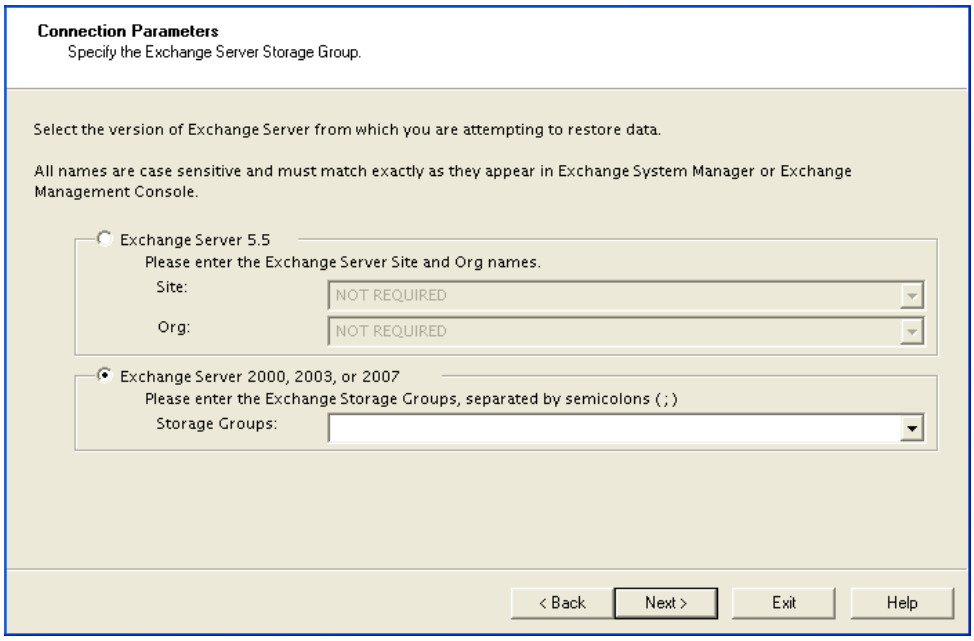
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
< Back
Next >
Exit
Help

Figure 4-3. Selecting Connection Parameters for Exchange Server 2000, 2003, or 2007

7. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
8. Click **Next**.
9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.
11. When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NT Backup. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

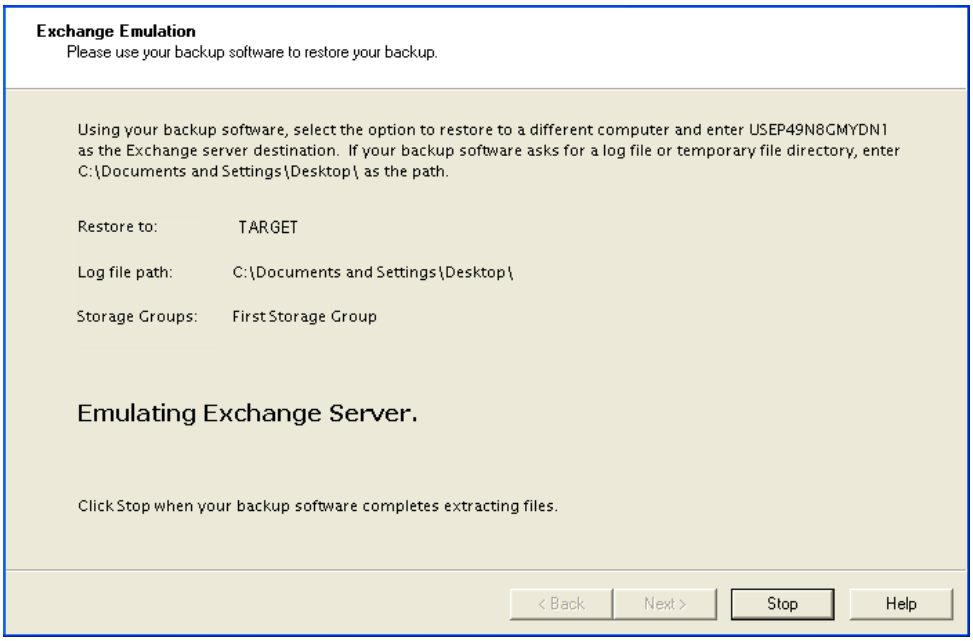
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 4-4. Exchange Emulation Page

Tip: *You can copy the "Restore to" and "Log file path" information on this page and paste it into NT Backup when prompted later in this section.*

12. Start NT Backup (Backup Utility in Windows XP and 2003) on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. Do one of the following:
    - If NT Backup is on a different computer than Ontrack PowerControls ExtractWizard, proceed to step 12.
    - If NT Backup is on the same computer as Ontrack PowerControls ExtractWizard, skip steps 12-15 and proceed to step 16.
14. In NT Backup, click the **Backup** tab.
15. On the **Tools** menu, click **Remote Store**.
16. In the **Remote Store** window, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). The name must be in all capital letters. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard. Click **OK**.
17. If you receive an error stating that the Microsoft Exchange Server does not appear in the **Backup** tree (i.e., it does not appear in the left pane in the **Backup** tab), this means that NT Backup is not able to verify the Ontrack PowerControls ExtractWizard emulation. Therefore, you must follow the steps outlined in this article from the Microsoft Knowledge Base: "XADM: Troubleshooting a Remote Online Backup of Exchange 2000": http://support.microsoft.com/?kbid=275676

    When NT Backup is completed verifying the computer, the Restore Target computer appears under the **Microsoft Exchange Server** node.

Copyright © 2011 Kroll Ontrack Inc.

18. In NT Backup, click the **Restore** tab (the **Restore and Manage Media** tab in Windows 2003).
19. In the tree view, select your Exchange backup from the list of media.
20. Click **Start Restore**. The **Restoring Database Store** window appears.
21. In the **Restore To** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). The name must be in all capital letters. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
22. In the **Temporary location for log and patch files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
23. Do not select either of the check boxes at the bottom of the **Restoring Database Restore** window.
24. Click **OK**. NT Backup will start to restore Exchange files to the Ontrack PowerControls ExtractWizard. The **Restore Progress** window appears.
25. When NT Backup is completed, click **Close** and close NT Backup.
26. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NT Backup: Exchange Server 5.5 on Windows 2000, Windows XP, and Windows Server 2003

Use the following steps for performing Exchange emulation for NT Backup with Exchange Server 5.5 on Windows 2000, Windows XP, and Windows Server 2003:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

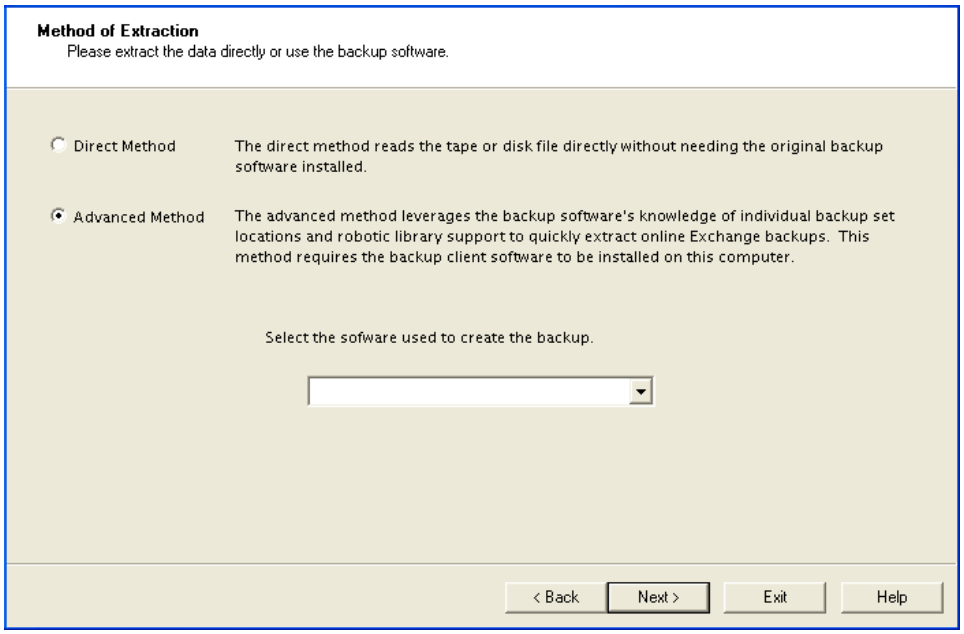
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 4-5. Method of Extraction Page for Advanced Method

5. Select **NT Backup** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option and click **Next**.

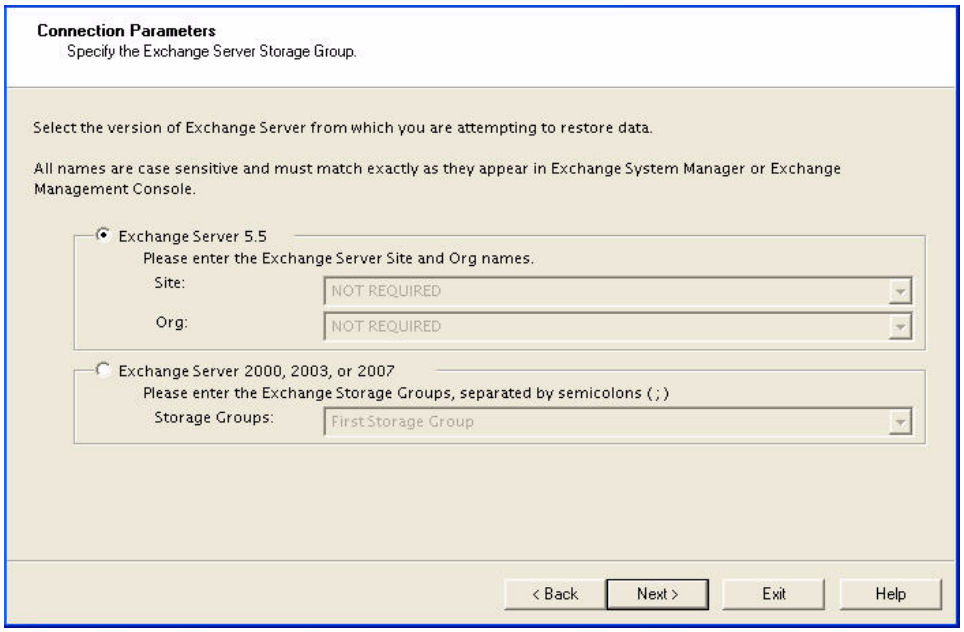
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
< Back
Next >
Exit
Help

Figure 4-6. Selecting Connection Parameters for Exchange Server 5.5

Copyright © 2011 Kroll Ontrack Inc.

7. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive and of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
8. Click **Next**.
9. When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NT Backup. Do not click the **Stop** button until you reach the end of these instructions.

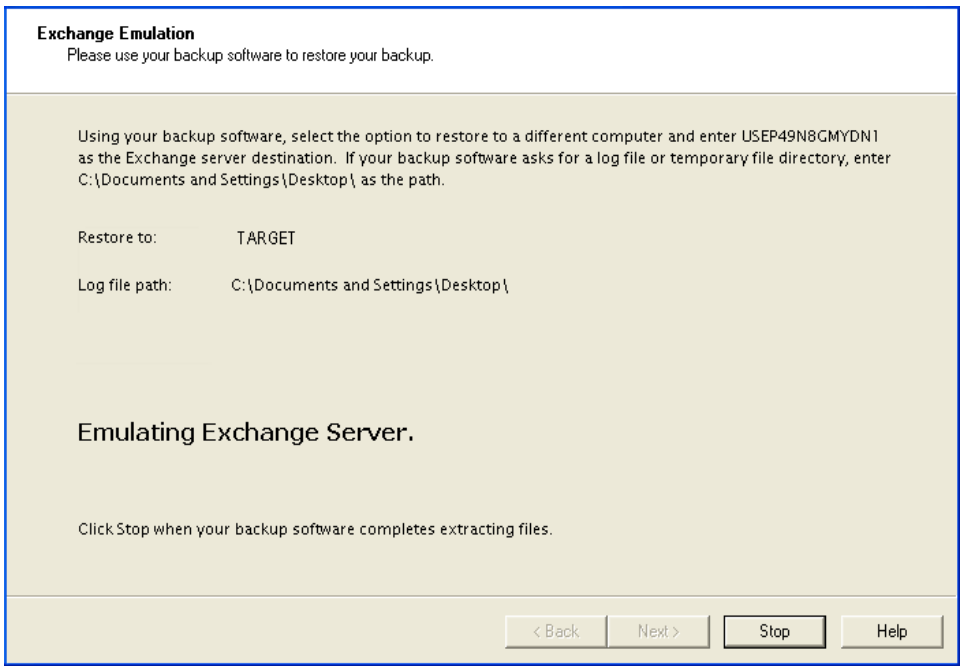
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 4-7. Exchange Emulation Page

Tip: *You can copy the "Restore to" information on this page and paste it into NT Backup when prompted later in this section.*

10. Start NT Backup (Backup Utility in Windows XP and 2003) on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
11. In NT Backup, click the **Restore** tab (the **Restore and Manage Media** tab in Windows 2003).
12. In the tree view, select your Exchange backup from the list of media. NT Backup allows you to restore only one Exchange Information Store at a time.

    Note: *You cannot restore the Directory.*

13. Click **Start Restore**. The **Restoring Microsoft Exchange** window appears.
14. Select the **Erase all existing data** check box.

Copyright © 2011 Kroll Ontrack Inc.

15. In the **Restore To** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). The name must be in all capital letters. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
16. Click **OK**. NT Backup will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
17. When NT Backup is completed, click **Close** and close NT Backup.
18. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NT Backup: Exchange Server 5.5 on Windows NT 4

Use the following steps for performing Exchange emulation for NT Backup with Exchange Server 5.5 on Windows NT 4:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

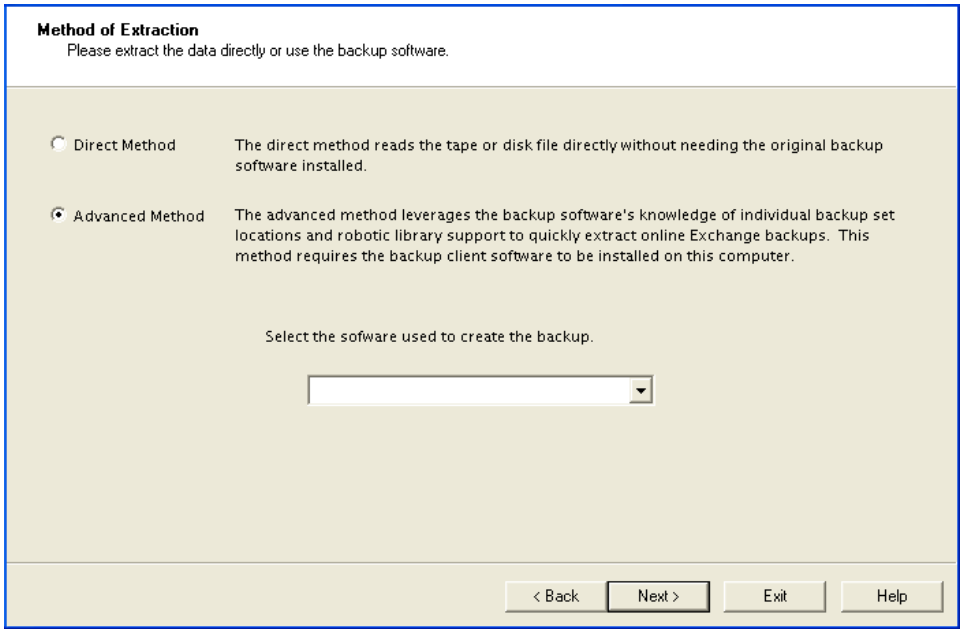
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 4-8. Method of Extraction Page for Advanced Method

Copyright © 2011 Kroll Ontrack Inc.

5. Select **NT Backup** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option and click **Next**.

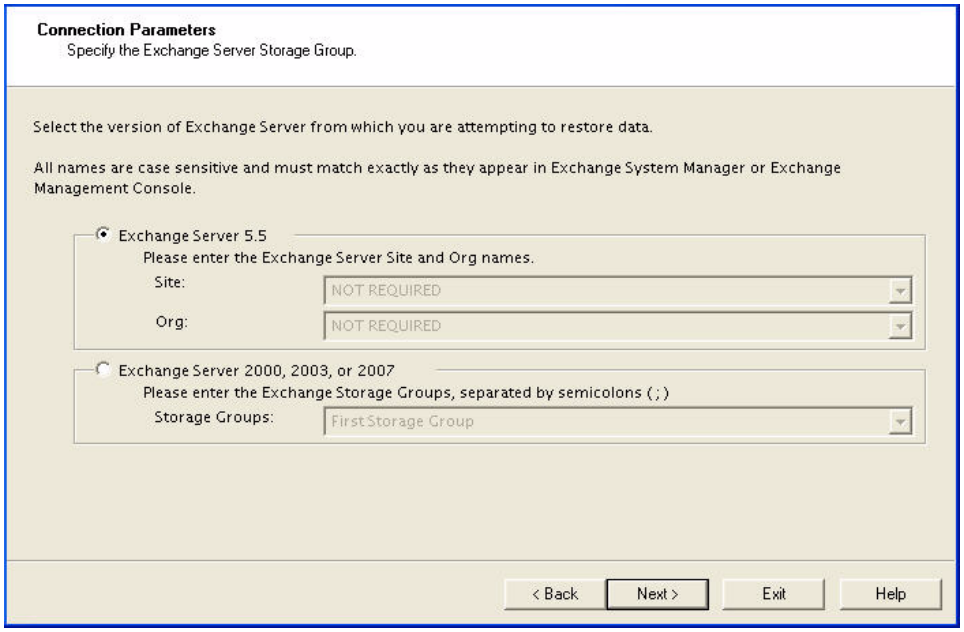
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
< Back
Next >
Exit
Help

Figure 4-9. Selecting Exchange Server 5.5 Connection Parameters

7. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive and of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
8. Click **Next**.

   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NT Backup. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

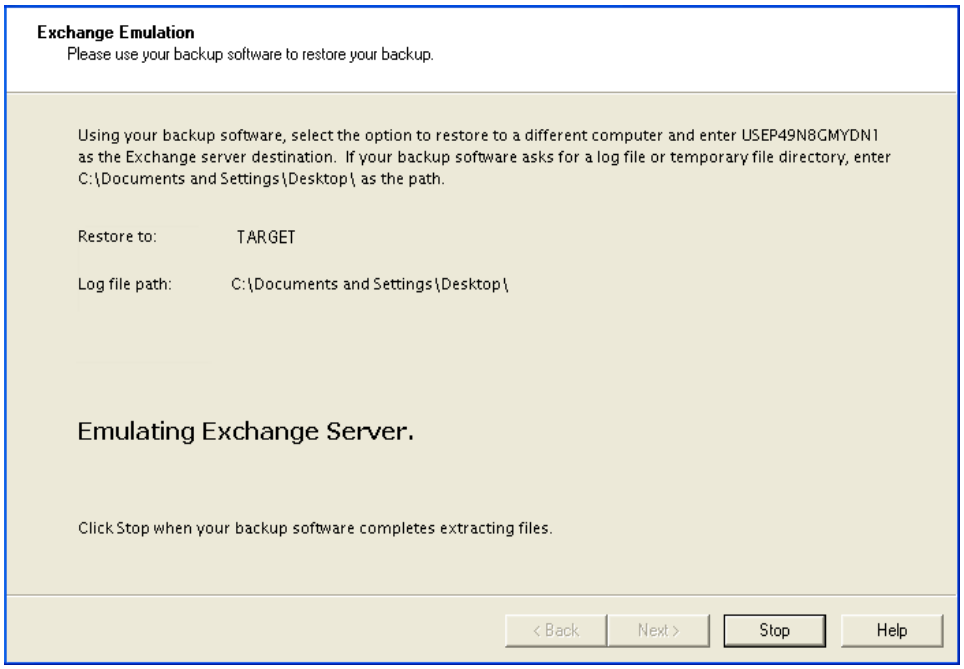
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 4-10. Exchange Emulation Page

Tip: *You can copy the "Restore to" information on this page and paste it into NT Backup when prompted later in this section.*

9. Start Microsoft NT Backup on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
10. In the **Tapes** window, select the Exchange backup you want to restore. NT Backup allows you to restore only one Exchange Information Store at a time.

    Note: *You cannot restore the Directory.*

11. Click **Restore**. The **Restoring Microsoft Exchange** window appears.
12. In the **Destination Server** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). The name must be in all capital letters. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
13. Select the **Erase all existing data** check box.
14. Click **OK**. NT Backup will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
15. When NT Backup is completed, click **Close** and close NT Backup.
16. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 5

USING THE EXCHANGE EMULATION METHOD - HP OPENVIEW STORAGE DATA PROTECTOR

Overview

Use the following steps to use HP OpenView Storage Data Protector as your backup client.

Exchange Emulation for HP OpenView Storage Data Protector and Exchange Server 2000/2003/2007

Use the following steps for performing Exchange emulation for HP OpenView Storage Data Protector with Exchange Server 2000/2003/2007:

1. Install HP client software on the computer that will be running Ontrack PowerControls ExtractWizard. When choosing components for this client, make sure to include the MS Exchange Integration component.

   Note: *If the computer running Ontrack PowerControls ExtractWizard already has the HP client software installed, make sure the MS Exchange Integration component has been included in the installation.*

Copyright © 2011 Kroll Ontrack Inc.

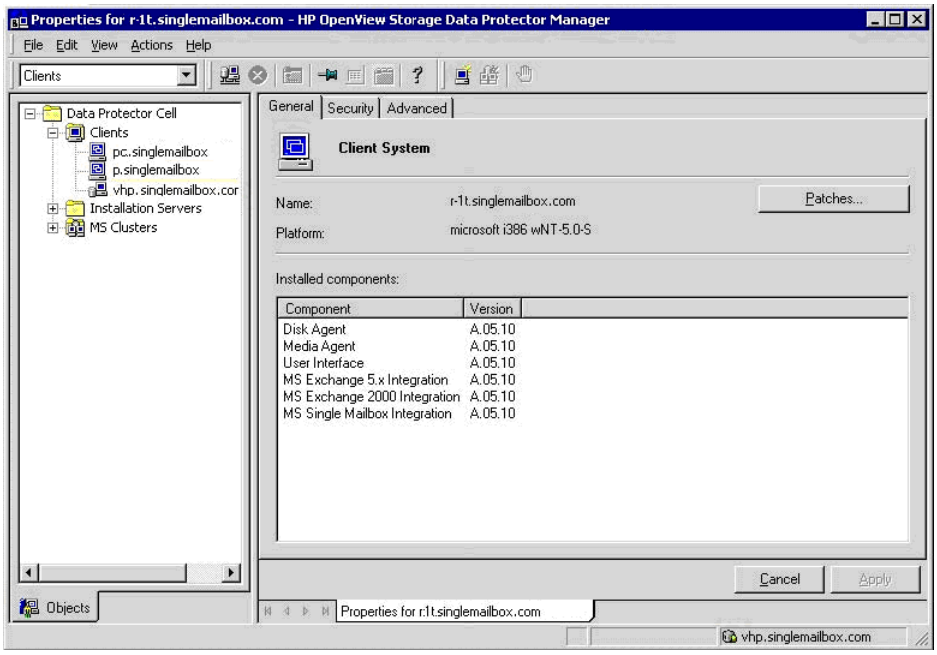

Figure 5-1. Properties Window for HP OpenView Storage Data Protector

2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32.
   - (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *When restoring an Exchange 2007 backup, using esebcli2.dll from the Exchange 2007 server will require that Ontrack PowerControls ExtractWizard is running on a 64-bit computer. If Ontrack PowerControls ExtractWizard is running on a 32-bit computer, use esebcli2.dll that is included with the 32-bit Microsoft Exchange Server 2007 Management Tools (available from www.microsoft.com).*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

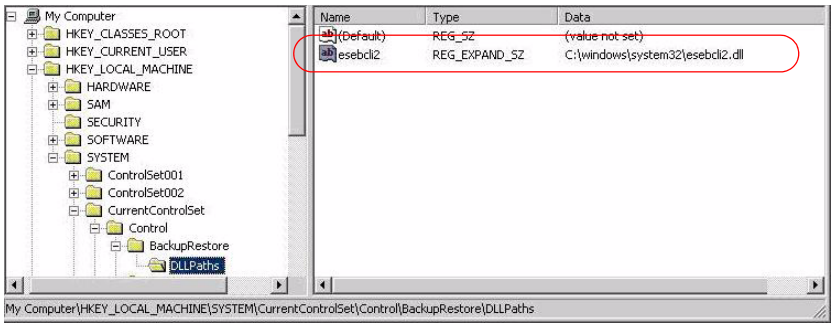

Figure 5-2. Example of Setting the Registry Key

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

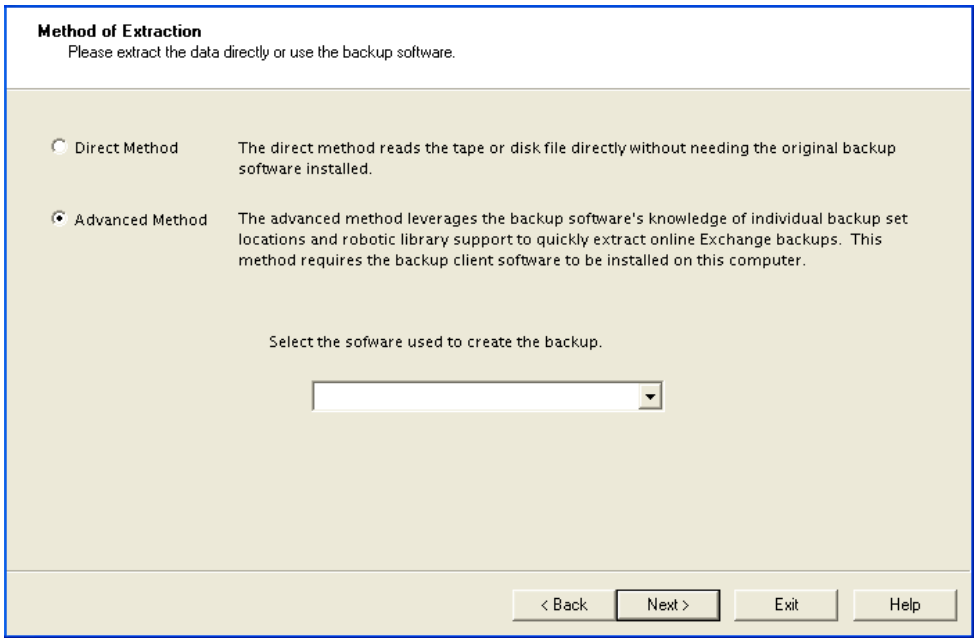
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 5-3. Method of Extraction Page for Advanced Method

6. Select **HP OpenView Storage Data Protector** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

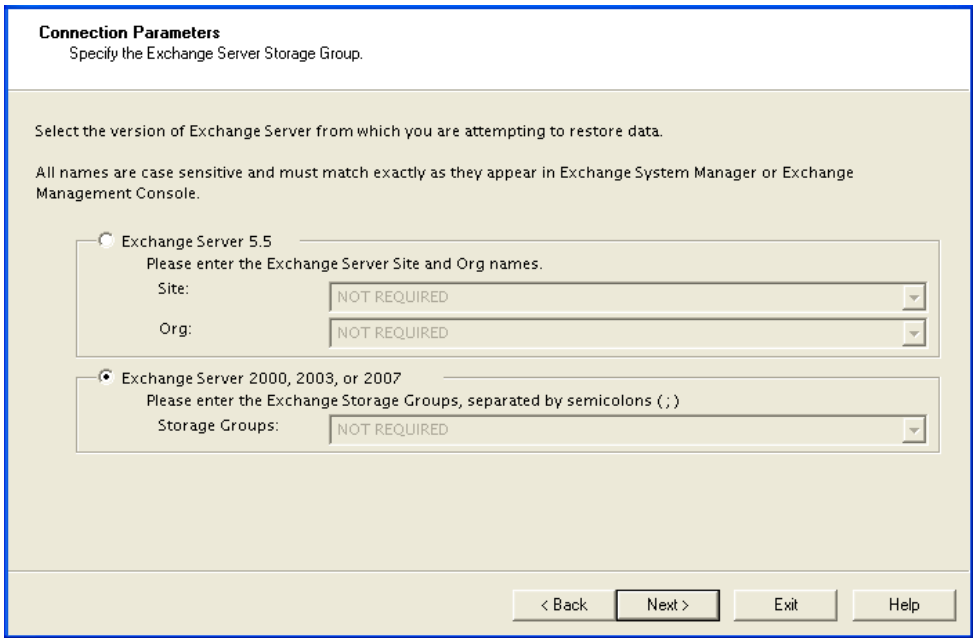
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 5-4. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

8. Click **Next**.
9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.

    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start HP OpenView Storage Data Protector. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

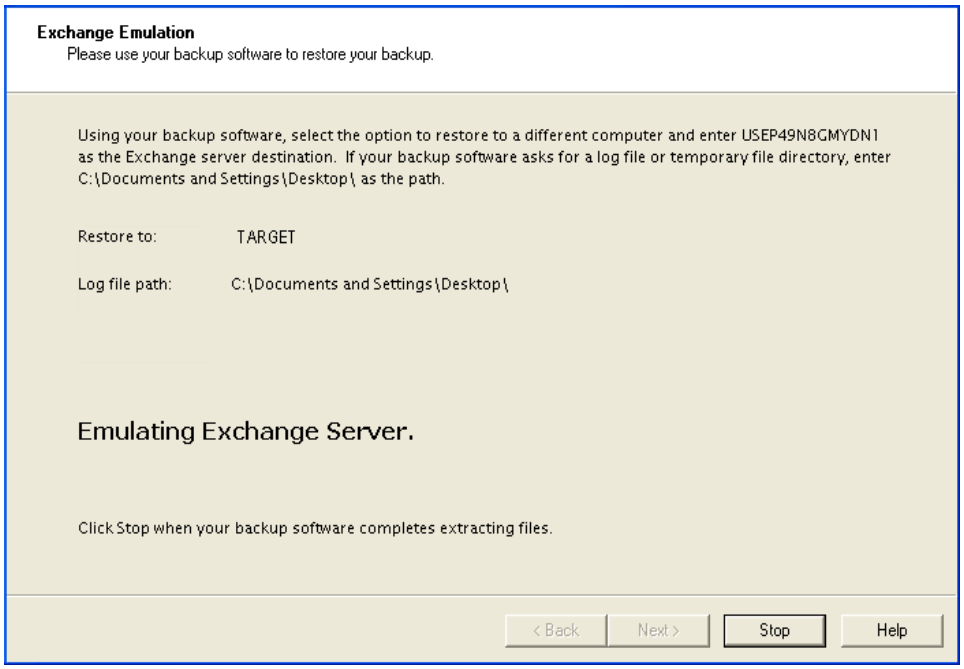
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 5-5. Exchange Emulation Page

Tip: *You can refer to the "Restore to" and "Log file path" information on this page when verifying it in HP OpenView Storage Data Protector later in this section.*

11. Start HP OpenView Storage Data Protector on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
12. Select **Restore** from the drop-down list at the top left of the window.
13. In the left pane, expand the MS Exchange Server tree node and select the appropriate Exchange Server.
14. In the right pane, click the **Source** tab and then select the Exchange backup you want to restore.
15. In the right pane, click the **Options** tab.
16. Select the **Restore to another client** check box.
17. Select the name of the Restore Target Computer from the drop-down menu. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. In the **Directory for temporary log files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.

    Note: *Do not include a trailing backslash ("\") when specifying the log file path in the* ***Directory for temporary log files*** *box. Doing so may cause the restore to abort.*

19. Do not select the **Last resort set (start recovery)** check box.

    Note: *If this check box is selected, HP OpenView Storage Data Protector will display a message stating the restore failed. Click OK. The files will still be extracted and usable.*

Copyright © 2011 Kroll Ontrack Inc.

20. Click the **Devices** tab, and verify your devices are properly configured.
21. Click the **Media** tab, and verify the required media is available.
22. Click **Restore**. The **Start Restore Session** window appears.
23. Do one of the following:
    - Click **Next** to specify options on Report level and Network load, and then click **Finish**.
    - Click **Finish**.
24. When HP OpenView Storage Data Protector says it is completed, close the program.
25. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for HP OpenView Storage Data Protector and Exchange Server 5.5

Use the following steps for performing Exchange emulation for HP OpenView Storage Data Protector with Exchange Server 5.5:

1. Install HP client software on the computer that will be running Ontrack PowerControls ExtractWizard. When choosing components for this client, make sure to include the MS Exchange 5.x Integration component.

   Note: *If the computer running Ontrack PowerControls ExtractWizard already has the HP client software installed, make sure the MS Exchange 5.x Integration component has been included in the installation.*

2. On the computer running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

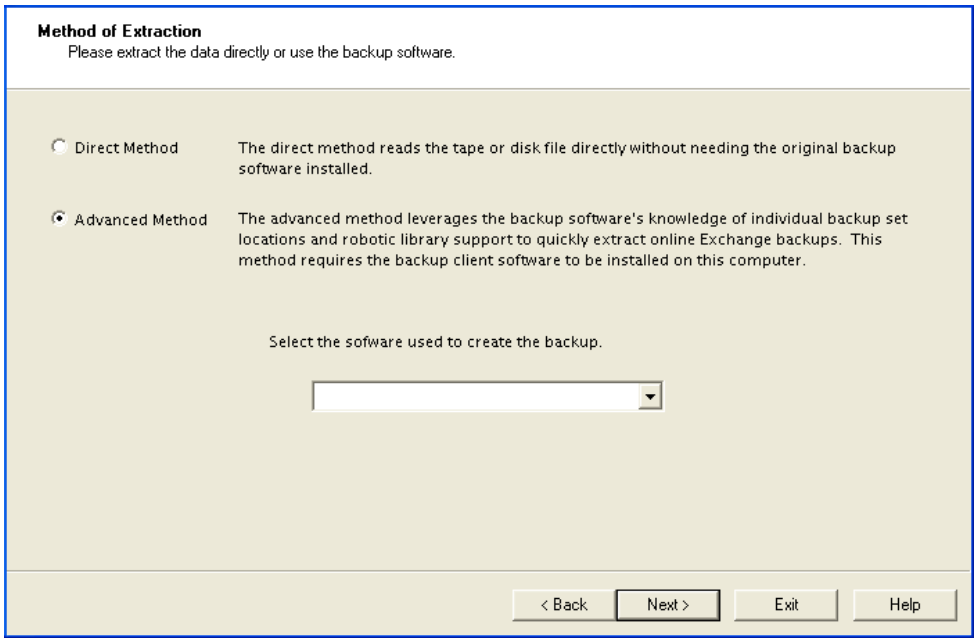
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 5-6. Method of Extraction Page for Advanced Method

6. Select **HP OpenView Storage Data Protector** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option.

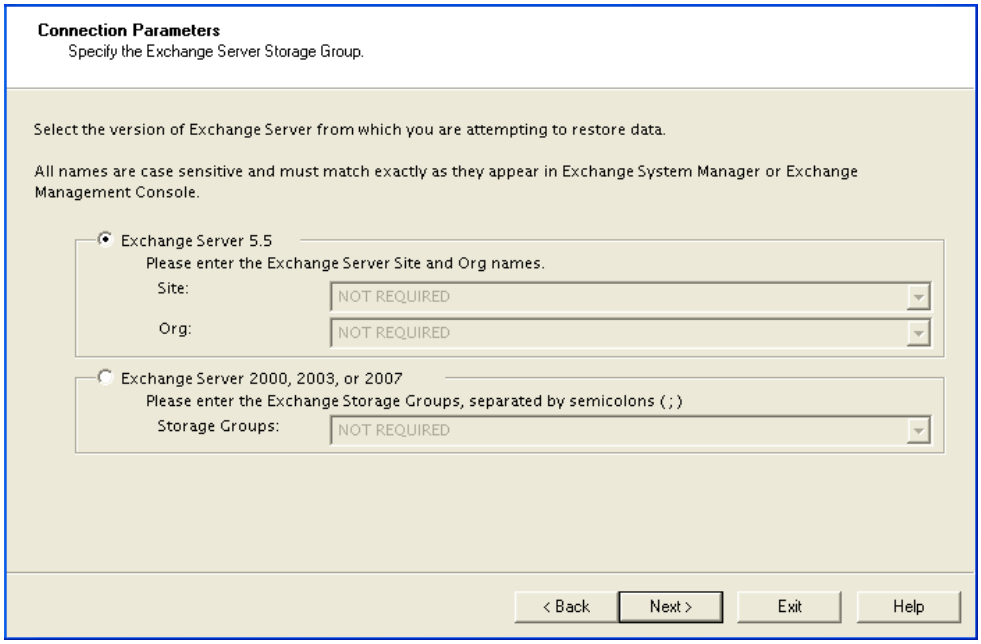
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 5-7. Selecting Exchange Server 5.5 Connection Parameters

8. Click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive and of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start HP OpenView Storage Data Protector. Do not click the **Stop** button until you reach the end of these instructions.

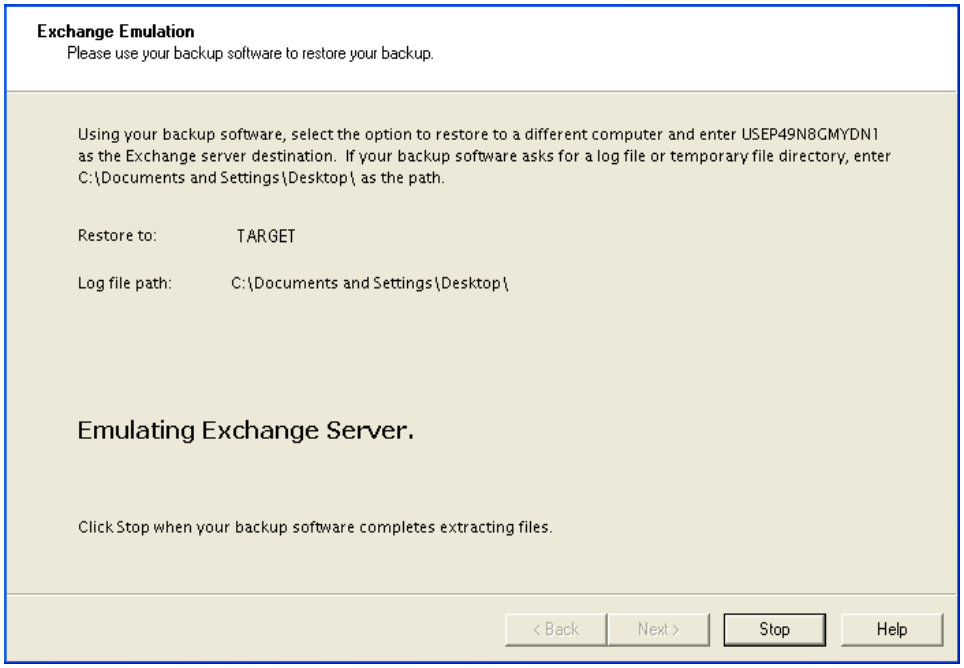
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 5-8. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in HP OpenView Storage Data Protector later in this section.*

11. Start HP OpenView Storage Data Protector on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
12. Select **Restore** from the drop-down list at the top left of the window.
13. In the left pane, expand the **MS Exchange 5.x Server** folder and select the appropriate Exchange Server.
14. In the right pane, select the Exchange backup you would like to restore.

    Note: *You cannot restore the DS object.*

15. In the right pane, click the **Options** tab.
16. Select the **Restore to another client** check box.

Copyright © 2011 Kroll Ontrack Inc.

17. Select the name of the Restore Target Computer from the drop-down menu. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. Do not select either the **Stop services before restore** check box or the **Start services after restore** check box.

    Note: *If these check boxes are selected, HP OpenView Storage Data Protector will display a message stating the restore failed. Click OK. The files will still be extracted and usable.*

19. Under **Restore actions**, select the action you want to perform:
    - Restore both databases
    - Restore private database only
    - Restore public database only
20. Click the **Devices** tab, and verify your devices are properly configured.
21. Click the **Media** tab, and verify the required media is available.
22. Click **Restore**. The **Start Restore Session** window appears.
23. Do one of the following:
    - Click **Next** to specify options on Report level and Network load, and then click **Finish**.
    - Click **Finish**.
24. When HP OpenView Storage Data Protector says it is completed, close the program.
25. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 6

USING THE EXCHANGE EMULATION METHOD - SYMANTEC BACKUP EXEC

Overview

Use the following steps to use Symantec Backup Exec as your client backup software.

Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 2000/2003

Use the following steps for performing Exchange emulation for Symantec Backup Exec 9.1/10.1 with Exchange Server 2000/2003:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32.
   - (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

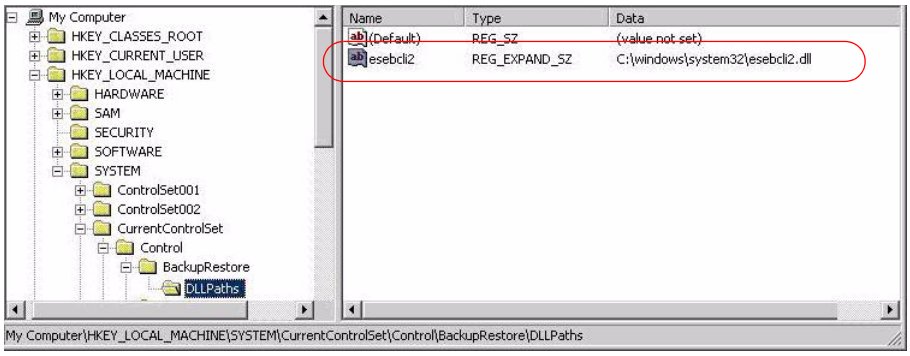

Figure 6-1. Example of Setting the Registry Key

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

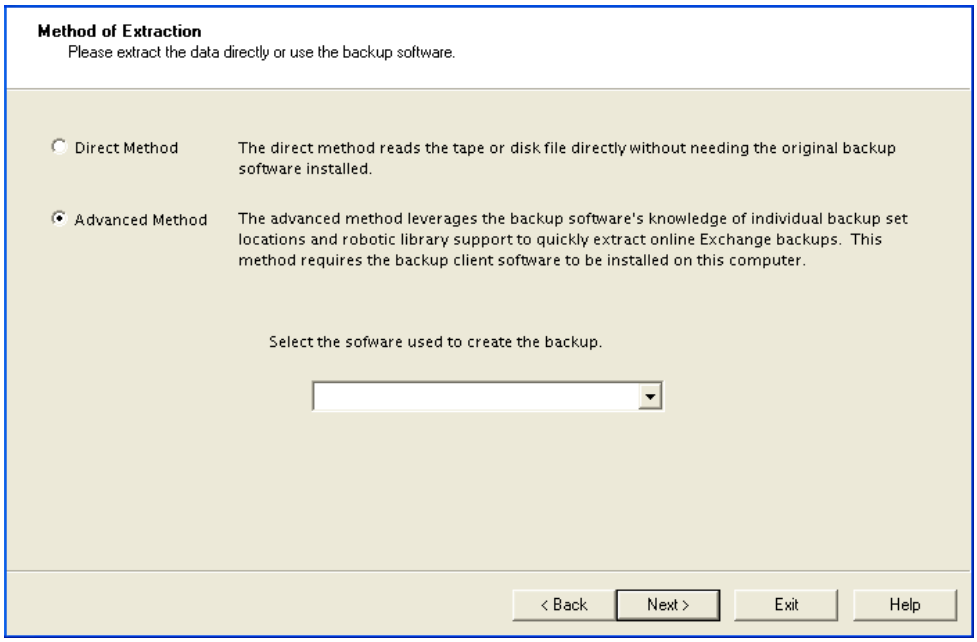
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-2. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, or 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

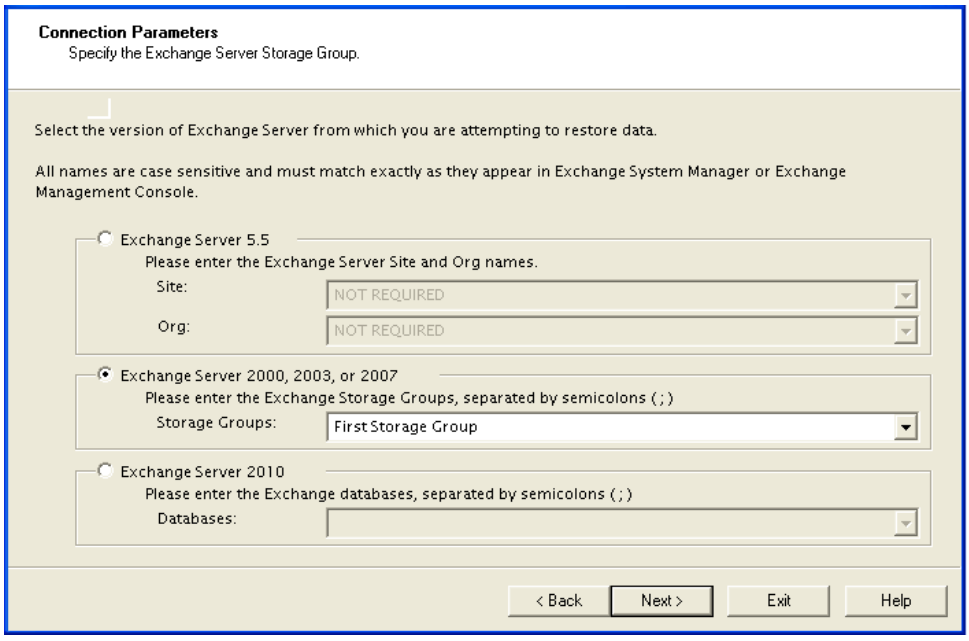
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-3. Selecting Exchange Server 2000, 2003 or 2007 Connection Parameters

8. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
9. Click **Next**.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

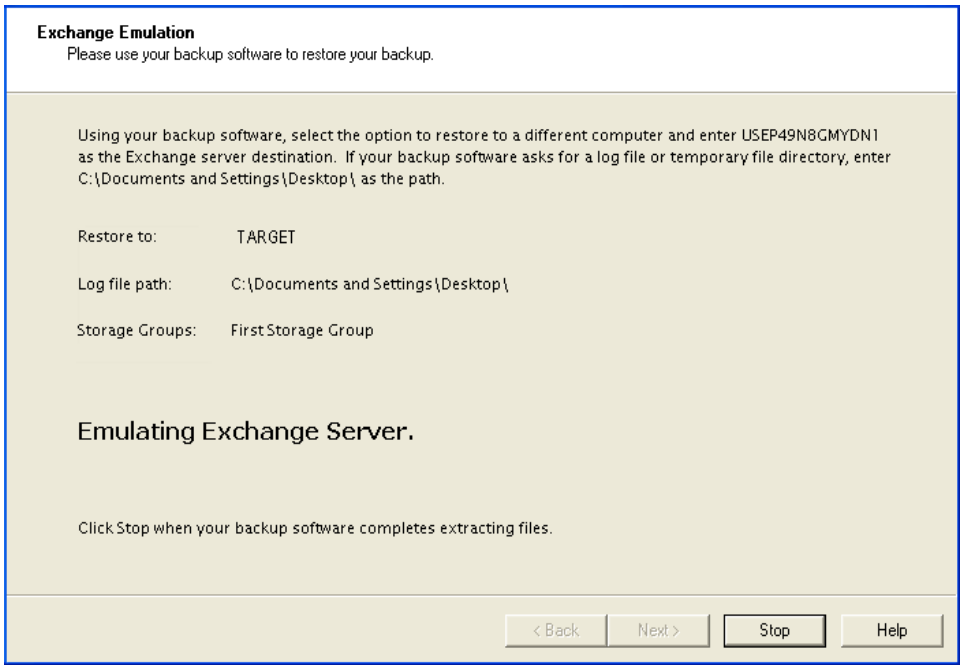
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-4. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in Symantec Backup Exec later in this section.*

12. Start Symantec Backup Exec 9.1/10.1 on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. Click **Restore**. The **Restore Job Properties** window appears.
14. In the **Properties** pane, select **Selections** under the **Source** heading.
15. In the **All Resources** tree, select the Exchange backup you want to restore.
16. In the **Properties** pane, select **Exchange Redirection** under the **Destination** heading.
17. Select the **Redirect Exchange** sets check box.
18. In the **Restore to server** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
19. In the **Server logon account**, change the logon account if necessary. The account you select must have backup operator rights to the Restore Target Computer.
20. In the **Properties** pane, select **Exchange** under the **Settings** heading.
21. In the **Exchange 2000 and Exchange 2003** area, clear the **No Loss Restore** check box.

    Important: *If the **No Loss Restore** check box is selected, the restore will fail.*

22. In the **Temporary location for log and path files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
23. Clear the **Commit after restore completes** check box.

Copyright © 2011 Kroll Ontrack Inc.

Caution: *Make sure to deselect the* ***Commit after restore completes*** *check box. If this check box remains selected, Backup Exec will automatically delete the restored files after completing the restore.*

24. Click **Run Now**. Backup Exec displays a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Symantec Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
25. When Backup Exec is completed, click **OK** and close Backup Exec.
26. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 11d and Exchange Server 2000/2003/2007

Use the following steps for performing Exchange emulation for Symantec Backup Exec 11d with Exchange Server 2000/2003/2007:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32.
   - (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

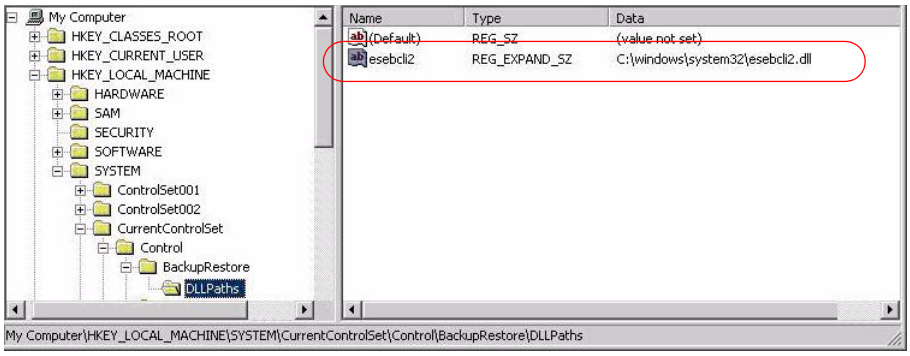

Figure 6-5. Example of Setting the Registry Key

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

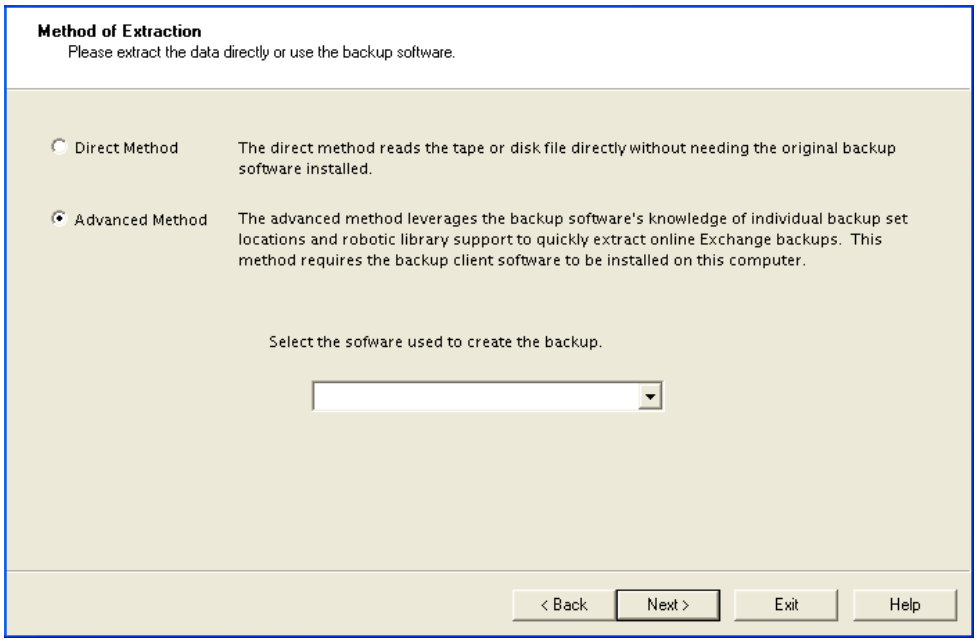
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-6. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

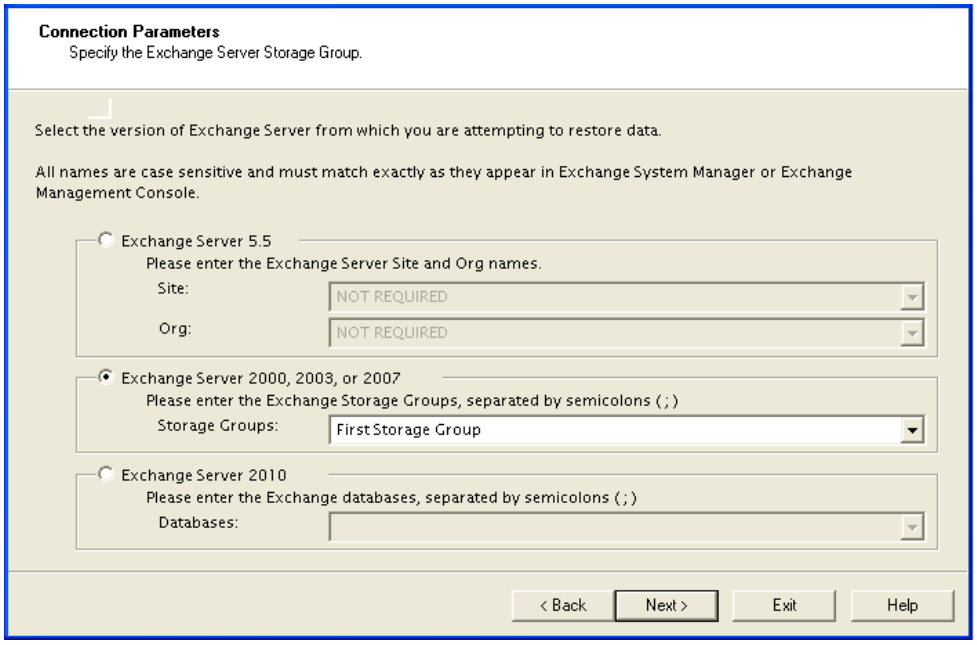
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-7. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

8. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
9. Click **Next**.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**. When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

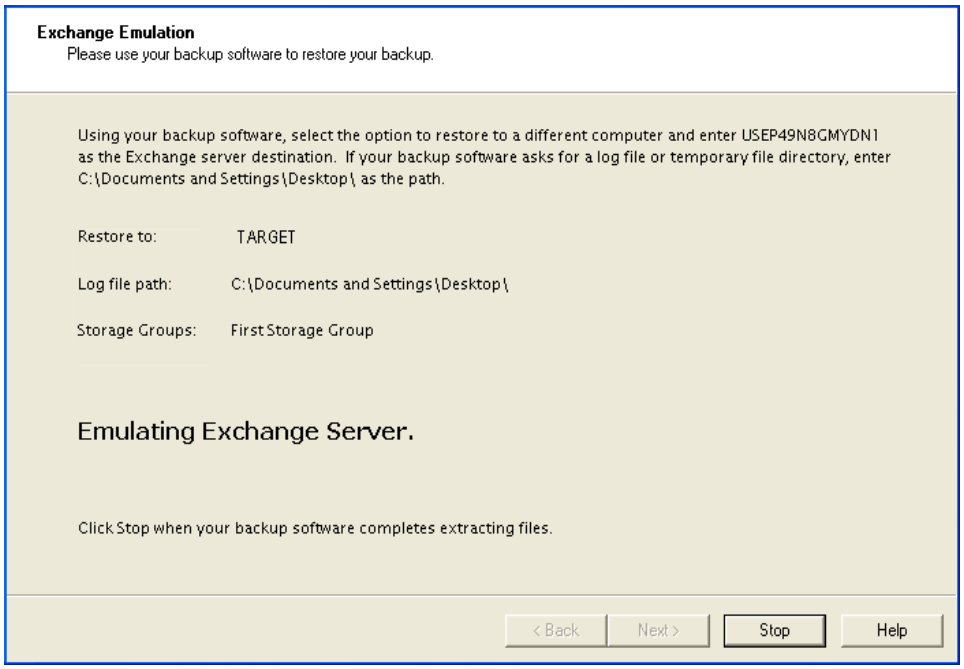
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-8. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in Symantec Backup Exec later in this section.*

12. Start Symantec Backup Exec 11d on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. Click **Restore**. The **Restore Job Properties** window appears.
14. In the **Properties** pane, select **Selections** under the **Source** heading.
15. In the **All Resources** tree, select the Exchange backup you want to restore.
16. In the **Properties** pane, select **Microsoft Exchange Redirection** under the **Destination** heading.
17. Select the **Redirect Exchange sets** check box.
18. In the **Restore to server** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
19. In the **Server logon account**, change the logon account if necessary. The account you select must have backup operator rights to the Restore Target Computer.
20. If using Volume Shadow Copy Services (VSS), select the **Redirect using Volume Shadow Copy Service (VSS) snapshot provider** check box.

    Note: *For Exchange 2000 restores, do not select the* ***Redirect using Volume Shadow Copy Service (VSS) snapshot provider*** *check box as Exchange 2000 does not use VSS.*

21. Select the **Redirect to drive and path (Exchange 2003 and 2007)** option.
22. In the **Restore to drive**, select the computer name of the one running Ontrack PowerControls ExtractWizard.

Copyright © 2011 Kroll Ontrack Inc.

23. In **Restore to path**, enter the path to that same computer. This should match the Ontrack PowerControls ExtractWizard destination path.
24. In the **Properties** pane, select **Microsoft Exchange** under the **Settings** heading.
25. In the **Exchange 2000 and later** area, select the **Purge existing data and restore only the databases and transaction logs from the backup sets** option.
26. In the **Exchange Server for temporary storage of log and patch files** box, enter the log file path.
27. Clear the **Commit after restore completes** and **Mount database after restore** check boxes.

    Caution: *Make sure to deselect the* ***Commit after restore completes*** *check box. If this check box remains selected, Backup Exec will automatically delete the restored files after completing the restore.*

28. Click **Run Now**. Backup Exec displays a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
29. When Backup Exec is completed, click **OK** and close Backup Exec.
30. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 12.0 and 12.5 and Exchange Server 2000/2003/2007

Use the following steps for performing Exchange emulation for Symantec Backup Exec 12.0 and 12.5 with Exchange Server 2000/2003/2007:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32.
   - (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

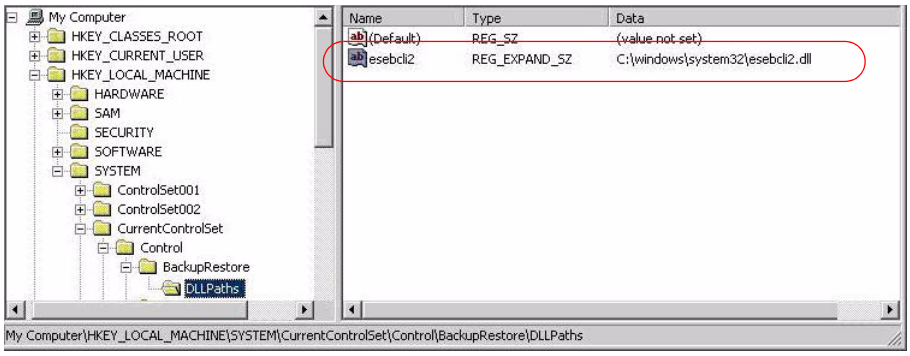

Figure 6-9. Example of Setting the Registry Key

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

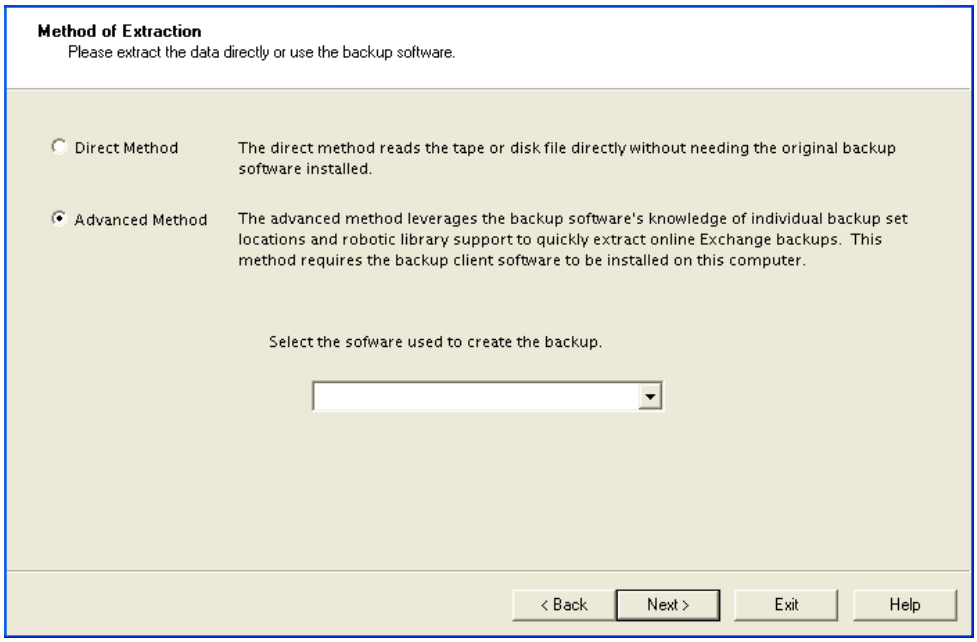
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-10. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

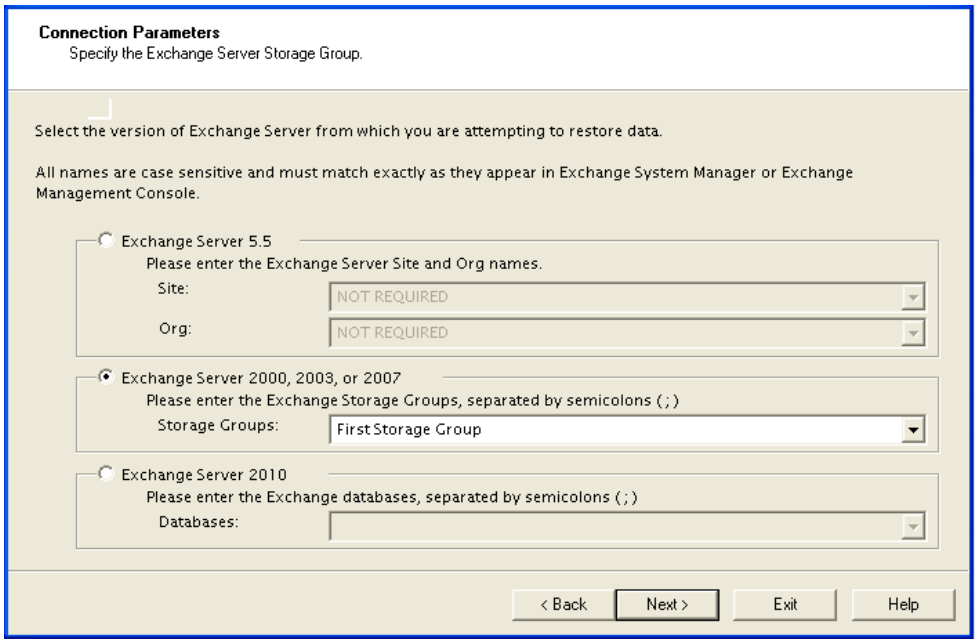
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-11. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

8. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
9. Click **Next**.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**. When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

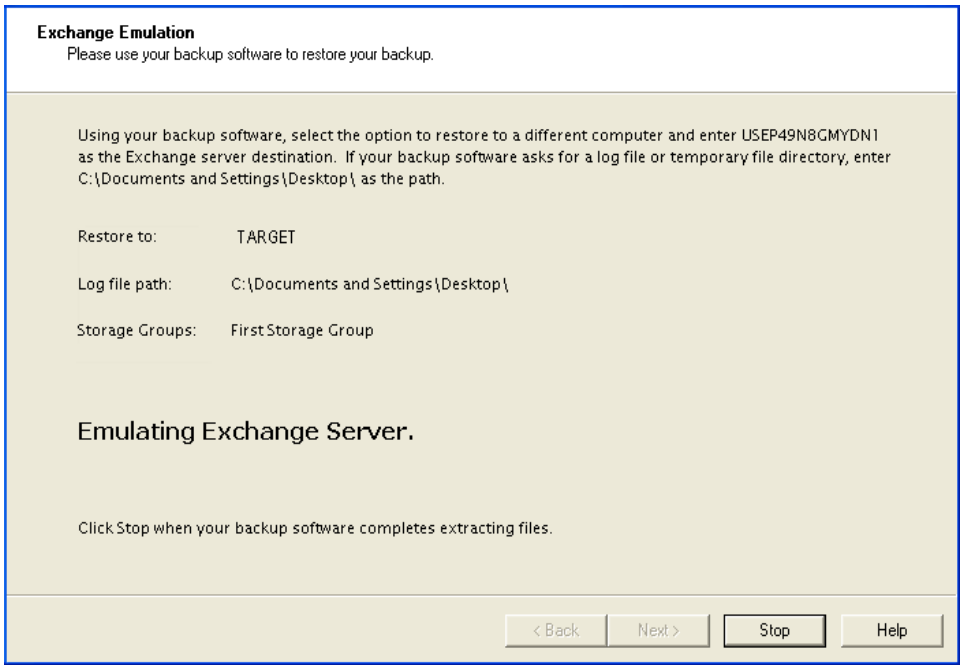
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-12. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in Symantec Backup Exec later in this section.*

12. Start Symantec Backup Exec 12.0 or 12.5 on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. Click the drop-down arrow next to the **Restore** button and select **New Restore Job**. The **Restore Job Properties** window appears.
14. In the **Properties** pane, select **Selections** under the **Source** heading.
15. In the **All Resources** tree, select the Exchange backup you want to restore.
16. In the **Properties** pane, select **Microsoft Exchange Redirection** under the **Destination** heading.
17. Select the **Redirect Exchange sets** check box.
18. In the **Restore to server** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
19. In the **Server logon account**, change the logon account if necessary. The account you select must have backup operator rights to the Restore Target Computer.
20. If using Volume Shadow Copy Services (VSS), select the **Redirect using Volume Shadow Copy Service (VSS) snapshot provider** check box.
    - Select the **Redirect to drive and path (Exchange 2003 and 2007)** option.
    - In the **Restore to drive**, select the computer name of the one running Ontrack PowerControls ExtractWizard.

Copyright © 2011 Kroll Ontrack Inc.

- In **Restore to path**, enter the path to that same computer. This should match the Ontrack PowerControls ExtractWizard destination path.

Note: *It is recommended that you use the browse button (...) to select the* ***Restore to drive*** *and* ***Restore to path*** *fields. This will ensure these fields are populated correctly.*

Note: *For Exchange 2000 restores, do not select the* ***Redirect using Volume Shadow Copy Service (VSS) snapshot provider*** *check box as Exchange 2000 does not use VSS.*

21. In the **Properties** pane, select **Microsoft Exchange** under the **Settings** heading.
22. In the **Exchange 2000 and later** area, select the **Purge existing data and restore only the databases and transaction logs from the backup sets** option.
23. In the **Exchange Server for temporary storage of log and patch files** box, enter the log file path.
24. Clear the **Commit after restore completes** and **Mount database after restore** check boxes.

    Caution: *Make sure to deselect the* ***Commit after restore completes*** *check box. If this check box remains selected, Backup Exec will automatically delete the restored files after completing the restore.*

25. Click **Run Now**. Backup Exec displays a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
26. When Backup Exec is completed, click **OK** and close Backup Exec.
27. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 2010 and Exchange Server 2003/2007/2010

Note: *It is recommended that Ontrack PowerControls ExtractWizard be run on the 32-bit (x86) edition of Windows when restoring Backup Exec 2010 data using the Advanced Method. Ontrack PowerControls ExtractWizard running on a 64-bit (x64) operating system is only supported if restoring a snapshot (VSS) backup.*

Use the following steps for performing Exchange emulation for Symantec Backup Exec 2010 with Exchange Server 2003, 2007, and 2010:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools for the appropriate version of Microsoft Exchange:

Copyright © 2011 Kroll Ontrack Inc.

***For Microsoft Exchange 2003**: Install the Exchange System Management Tools for Exchange 2003 and update the system path to include the Exchsrvr\bin\ directory.*

***For Microsoft Exchange 2007**: Install the Exchange Server 2007 Management Tools and update the system path to include the Microsoft\Exchange Server\bin\ directory.*

***For Microsoft Exchange 2010**: Install the Exchange Server 2010 Management Tools and update the system path to include the Microsoft\Exchange Server\bin\ directory.*

- **Option 2:** Copy the esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

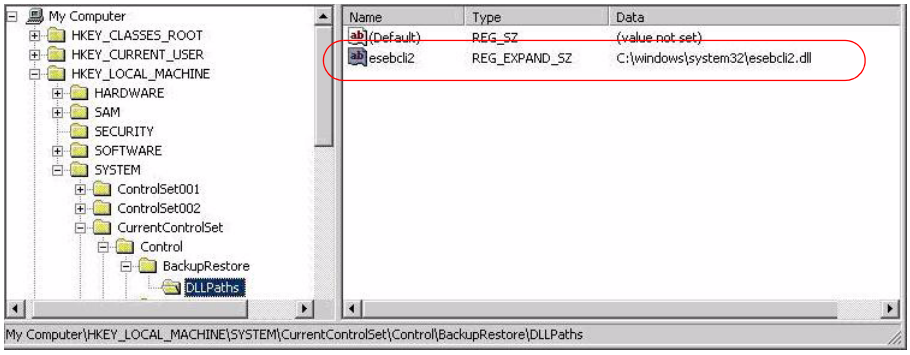

Figure 6-13. Example of Setting the Registry Key

***Note:** It is recommended that the version of Exchange Management Tools (or esebcli2.dll) used should match the version of the Exchange Server for the data being restored; for example, if restoring data from the Exchange Server 2007, use the Exchange System Management Tools for Exchange Server 2007 (or esebcli2.dll).*

***Note:** If restoring non-snapshot backups, 32-bit Windows and Management tools must be used.*

***Note:** For 64-bit operating systems restoring a snapshot (VSS) backup, the esebcli2.dll must also be copied into the SysWoW64 folder.*

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. On the first page of the Ontrack PowerControls ExtractWizard, click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

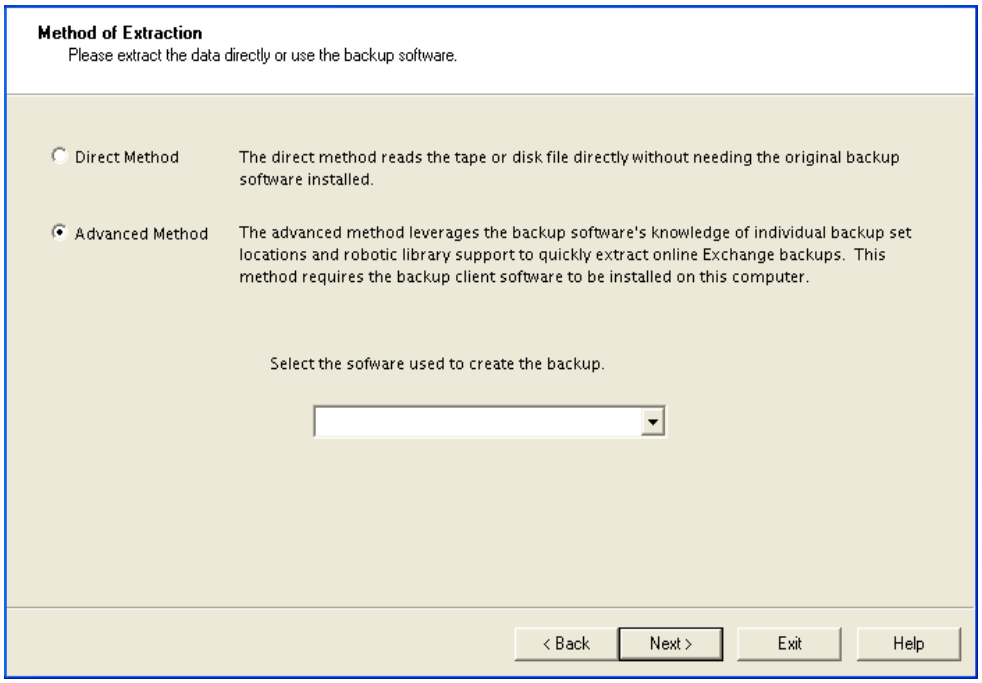
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-14. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, do one of the following:
   - ***For restores of Exchange Server 2003, or 2007***: Select the **Exchange Server 2000, 2003, or 2007** option, and in the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the management console for Exchange Server. You can enter multiple storage groups, separated by semicolons (;).

Copyright © 2011 Kroll Ontrack Inc.

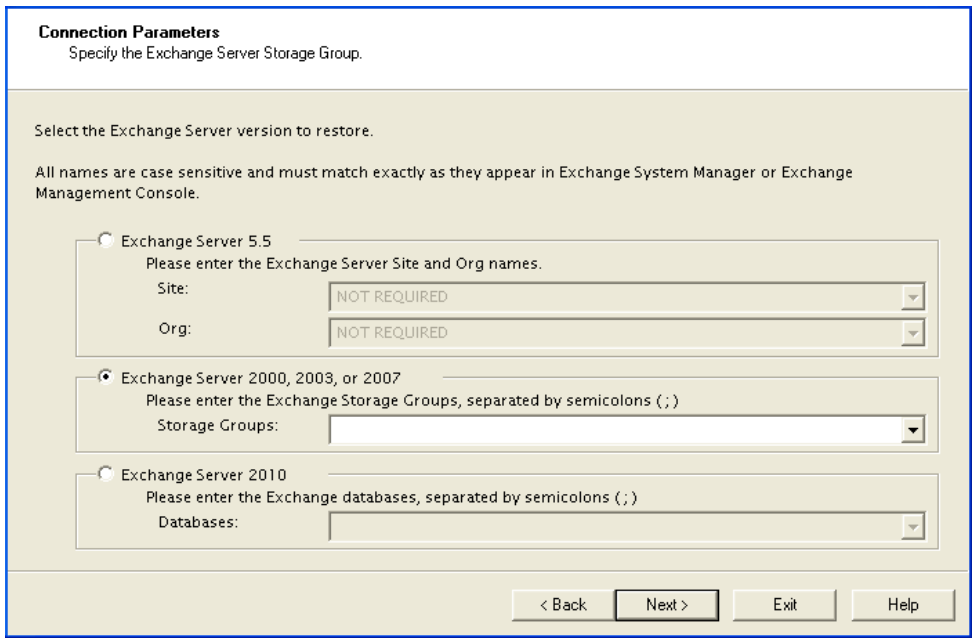
Connection Parameters
Specify the Exchange Server Storage Group.
Select the Exchange Server version to restore.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-15. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

- ***For restores of Exchange Server 2010***: Select the **Exchange Server 2010** option, and in the **Databases** box, enter the name of the database you will be extracting. The database name is case sensitive and must match exactly the name that appears in the management console for Exchange Server. You can enter multiple databases, separated by semicolons (;).

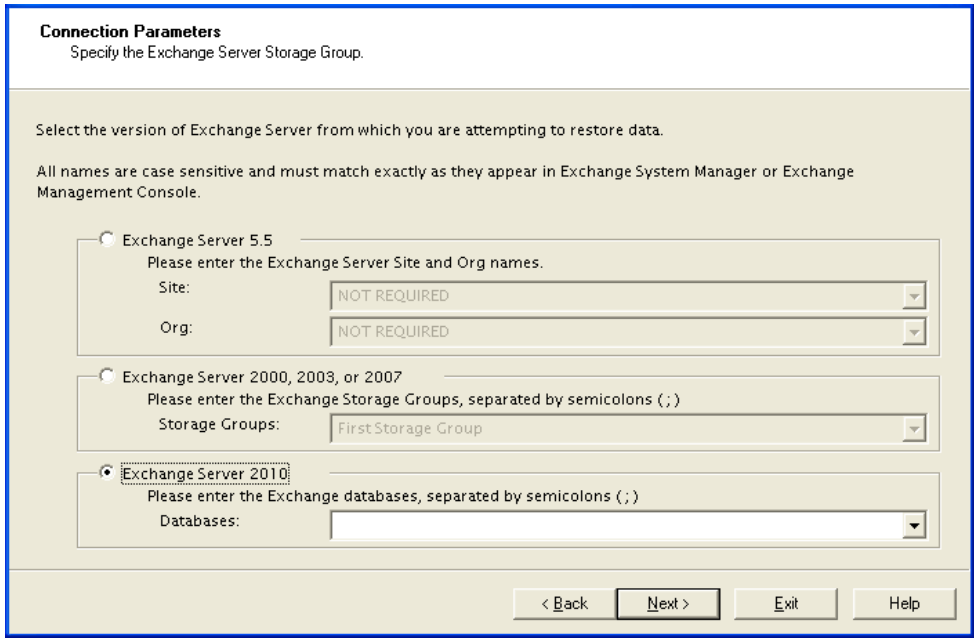
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-16. Selecting Exchange Server 2010 Connection Parameters

8. Click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, use the **Destination Folder** box to specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder. (If a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it.)
10. Click **Next**.

    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to continue to the next step.

    Important: *Do not click the* ***Stop*** *button or close the Exchange Emulation page until you reach the end of these instructions.*

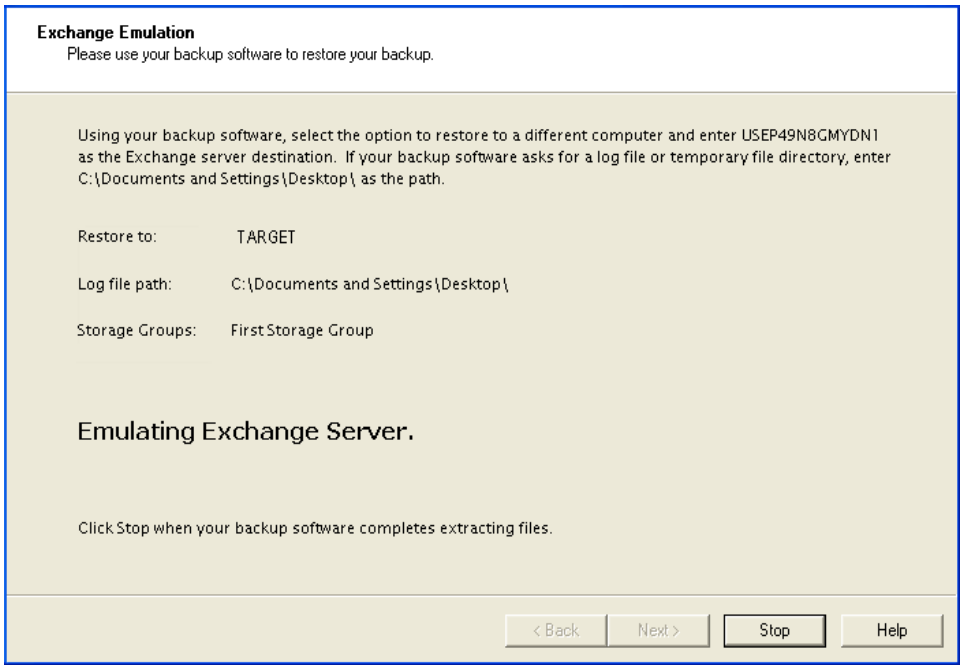
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-17. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in Symantec Backup Exec later in this section.*

11. Restart the Backup Exec Remote Agent for Windows Systems service by doing the following:

    Warning*: Before restarting the Backup Exec Remote Agent for Windows Systems service, ensure that there are no active Backup Exec backup or restore operations running on the system.*

    Note for Windows Vista and later versions*: Run the Services Management console as Administrator.*

    - From the **Start** menu, select **Run**.
    - In the **Open** box, type **services.msc** and press Enter to open the Services management console.
    - Click the **Backup Exec Remote Agent for Windows Systems** service.

Copyright © 2011 Kroll Ontrack Inc.

- *If the service is already running*, click **Restart the service**.
- *If the service is not running*, click **Start the service**.

- After starting or restarting Backup Exec Remote Agent for Windows Systems, verify that **Started** appears in its Status column.

12. Start Symantec Backup Exec 2010 on the computer where restores are normally run. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. Click the drop-down arrow next to the **Restore** button and select **New Restore Job**. The **Restore Job Properties** window appears.
14. In the **Properties** pane, select **Selections** under the **Source** heading.
15. In the **All Resources** tree, select the Exchange backup you want to restore.
16. In the **Properties** pane, select **Microsoft Exchange Redirection** under the **Destination** heading.
17. Select the **Redirect Exchange sets** check box.
18. In **Restore to server**, enter the name of the Restore Target Computer (the computer running Ontrack PowerControls ExtractWizard). Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
19. In **Server logon account**, change the logon account if necessary. The account you select must have backup operator rights to the Restore Target Computer.
20. If restoring a snapshot backup made through the Volume Shadow Copy Services (VSS), perform these additional steps:
    - Select the **Redirect using Volume Shadow Copy Service (VSS) snapshot provider** check box.
    - Select the **Redirect to drive and path (Exchange 2003 and 2007)** option.
    - In **Restore to drive**, select name of the computer name running Ontrack PowerControls ExtractWizard.
    - In **Restore to path**, enter the path to that same computer. This should match the Ontrack PowerControls ExtractWizard destination path.

    Note: *It is recommended that you use the browse button (...) to select the* ***Restore to drive*** *and* ***Restore to path*** *fields. This ensures these fields are populated correctly.*

    - In the **Properties** pane, select **File Redirection** under the **Destination** heading and select the **Redirect file sets** check box.
    - In the **Restore to drive**, select name of the computer name running Ontrack PowerControls ExtractWizard.
    - In the **Server logon account**, change the logon account if necessary.
    - In **Restore to path**, enter the path to that same computer. This should match the Ontrack PowerControls ExtractWizard destination path.

    Note: *It is recommended that you use the browse button (...) to select the* ***Restore to drive*** *and* ***Restore to path*** *fields. This will ensure these fields are populated correctly.*

21. In the **Properties** pane, select **Microsoft Exchange** under the **Settings** heading.
22. In the **Exchange 2000 and later** area, select the **Purge existing data and restore only the databases and transaction logs from the backup sets** option.
23. In the **Exchange Server for temporary storage of log and patch files** box, enter the log file path.

Copyright © 2011 Kroll Ontrack Inc.

24. Clear the **Commit after restore completes** and **Mount database after restore** check boxes.

    Caution: *Make sure* ***Commit after restore completes*** *is not selected. If this check box remains selected, Backup Exec will automatically delete the restored files after completing the restore.*

25. Click **Run Now**. Backup Exec displays a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
26. When Backup Exec is completed, click **OK** and close Backup Exec.
27. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 5.5

Use the following steps for performing Exchange emulation for Symantec Backup Exec 9.1/10.1 with Exchange Server 5.5:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

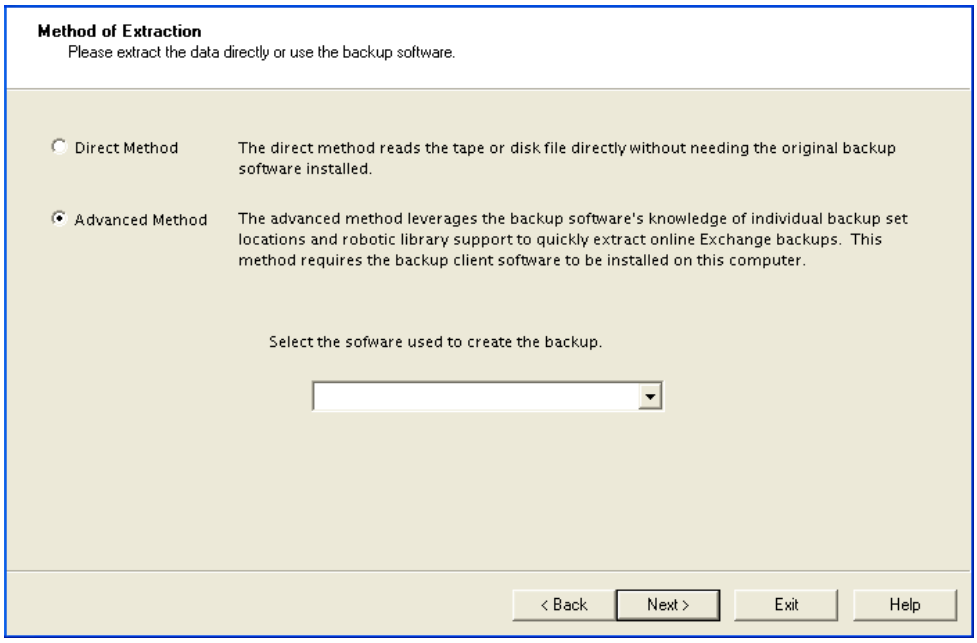
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-18. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option.

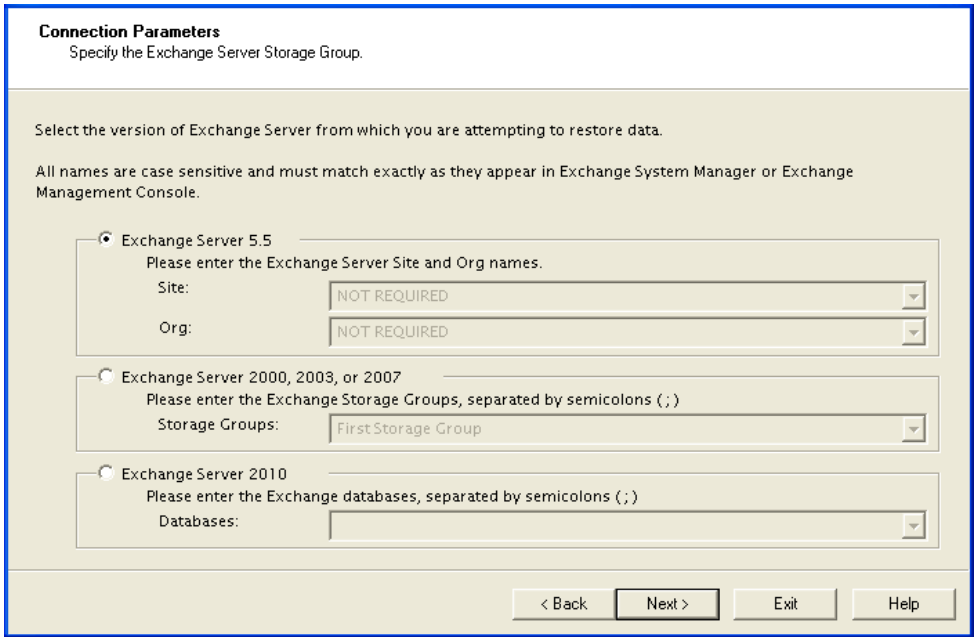
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-19. Selecting Exchange Server 5.5 Connection Parameters

8. Click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

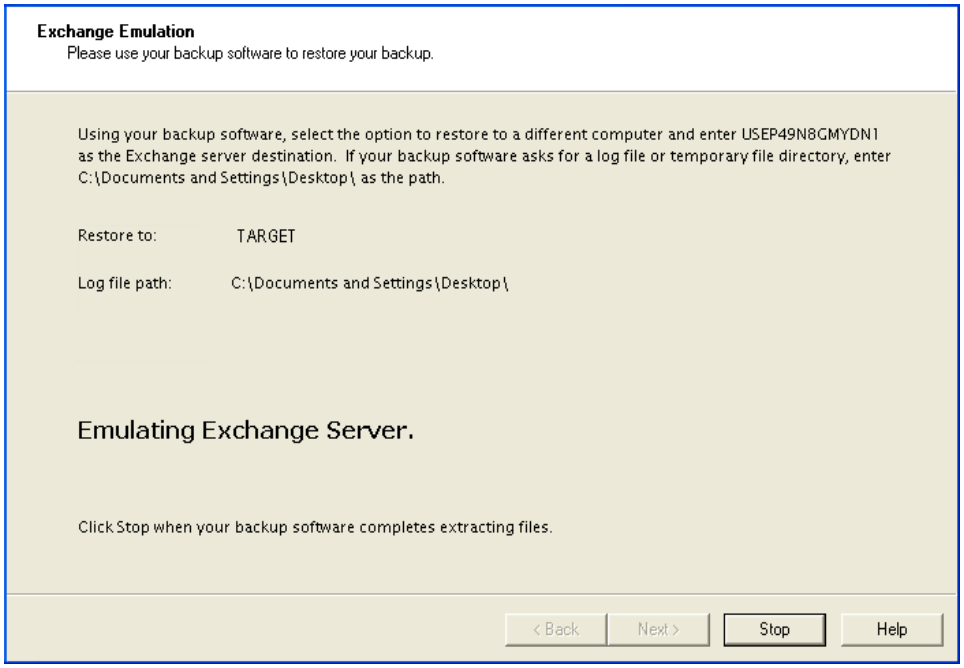
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-20. Exchange Emulation Page

Tip: *You can copy the "Restore to" information on this page and paste it into Backup Exec when prompted later in this section.*

11. Start Symantec Backup Exec on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
12. Click **Restore** at the top left of the Backup Exec window. The **Restore Job Properties** window appears.
13. In the **Properties** pane, select **Selections** under the **Source** heading.
14. In the **All Resources** tree, select the Exchange backup you want to restore.

    Note: *You cannot restore the Microsoft Exchange Directory.*

15. In the **Properties** pane, select **Exchange Redirection** under the **Destination** heading.
16. Select the **Redirect Exchange** sets check box.

Copyright © 2011 Kroll Ontrack Inc.

17. In the **Restore to server** box, enter the name of the Restore Target Computer (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. In the **Server logon account**, change the logon account if necessary. The account you select must have backup operator rights to the Restore Target Computer.
19. In the **Properties** pane, select **Exchange** under the **Settings** heading.
20. In the **Exchange v5.5** area, clear the **No Loss Restore** check box.

    Important: *If the **No Loss Restore** check box is selected, the restore will fail.*

21. Select one or both of the following check boxes: Select the **Restore public folder** if you would like to restore the pub.edb. Select the **Restore private mailboxes** if you would like to restore the priv.edb.
22. Click **Run Now**. Backup Exec will display a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
23. When Backup Exec is completed, click **OK** and close Backup Exec.
24. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 2000/2003

Use the following steps for performing Exchange emulation for Symantec Backup Exec 8.6 with Exchange Server 2000/2003:

1. Install "Backup Exec Remote Agent for Windows Servers" client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32.
   - (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

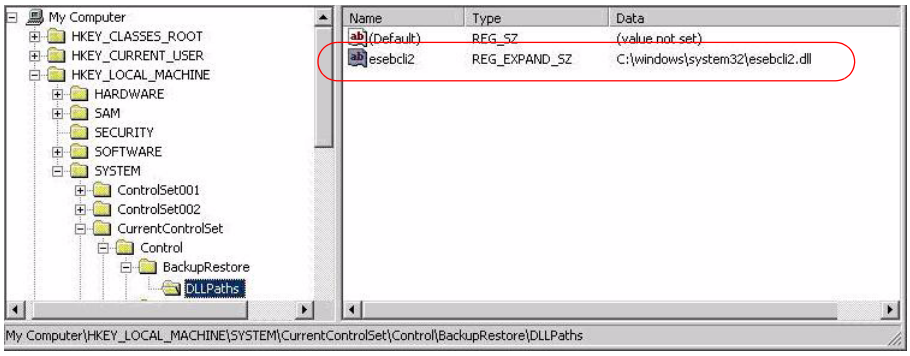

Figure 6-21. Example of Setting the Registry Key

3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

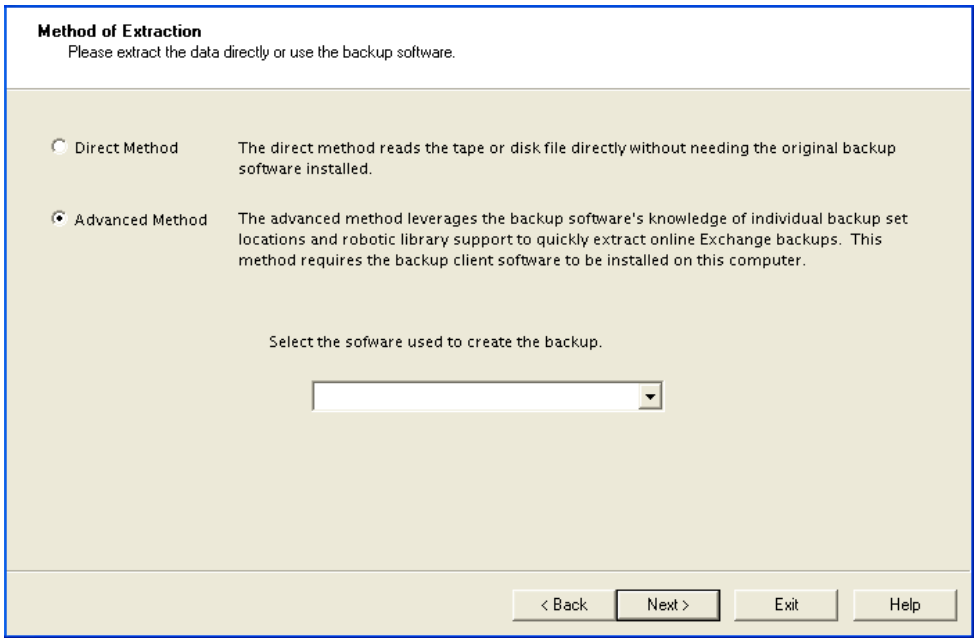
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-22. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

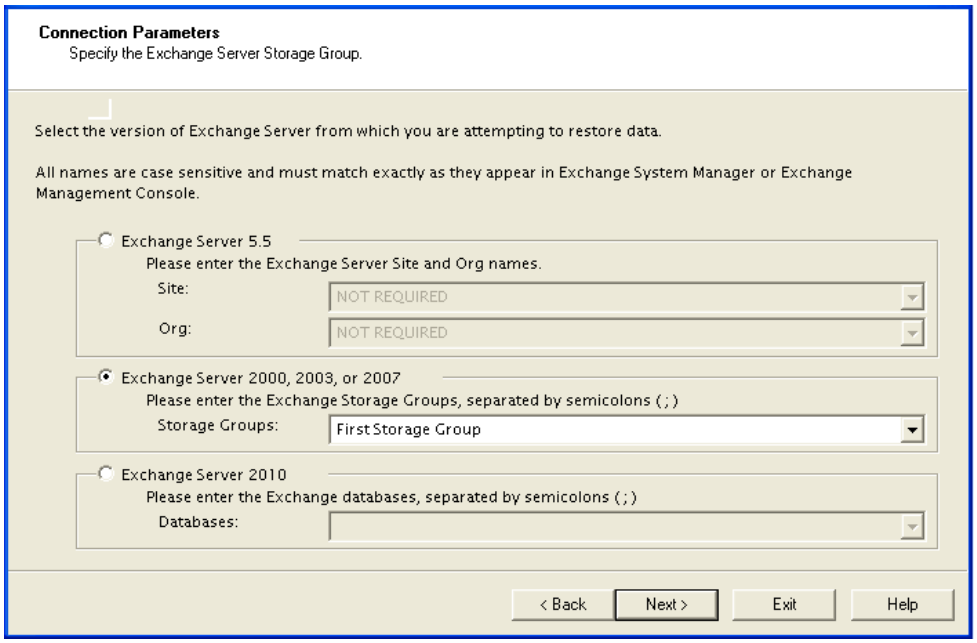
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-23. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

8. In the **Storage Groups** box, enter the name of the storage group you will be extracting, exactly as it appears in the Exchange System Manager. Backup Exec will check this name, which is case sensitive, and it must match exactly. You can enter multiple storage groups, separated by semicolons (;).
9. Click **Next**.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

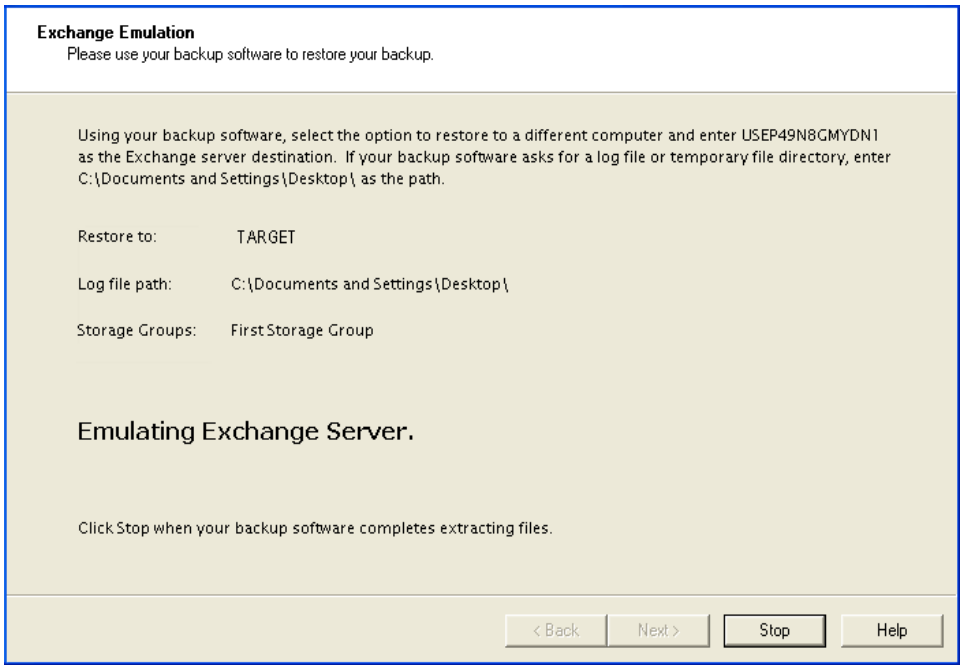
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-24. Exchange Emulation Page

Tip: *You can copy the "Restore to" and "Log file path" information on this page and paste it into Backup Exec when prompted later in this section.*

12. Start Symantec Backup Exec on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
13. On the toolbar at the top of the Backup Exec window, click **Restore**. The **Restore Job Properties** window appears.
14. In the **Restore Job Properties** window, click the **Selections** tab.
15. In the **All Volumes** tree, select the Exchange backup you want to restore.
16. Click the **Redirection** tab.
17. Select the **Redirect Exchange sets** check box.
18. In the **Restore to server** box, enter the name of the Restore Target Computer. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
19. Select the **Exchange** tab.
20. In the **Exchange 2000** area, clear the **No Loss Restore** check box.

    Important: *If the **No Loss Restore** check box is selected, the restore will fail.*

21. In the **Temporary location for log and path files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
22. Clear the **Commit after restore completes** check box.

Copyright © 2011 Kroll Ontrack Inc.

Caution: *Make sure to deselect the* ***Commit after restore completes*** *check box. If this check box remains selected, Backup Exec will automatically delete the restored files after completing the restore.*

23. Click **Run Now**. Backup Exec will display a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
24. When Backup Exec is completed, click **OK** and close Backup Exec.
25. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 5.5

Use the following steps for performing Exchange emulation for Symantec Backup Exec 8.6 with Exchange Server 5.5:

1. Install “Backup Exec Remote Agent for Windows Servers” client software on the computer that will be running Ontrack PowerControls ExtractWizard.
2. On the computer running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
3. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is known as the Restore Target Computer.
4. Click **Next**.
5. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method** and **Symantec Backup Exec**.

Copyright © 2011 Kroll Ontrack Inc.

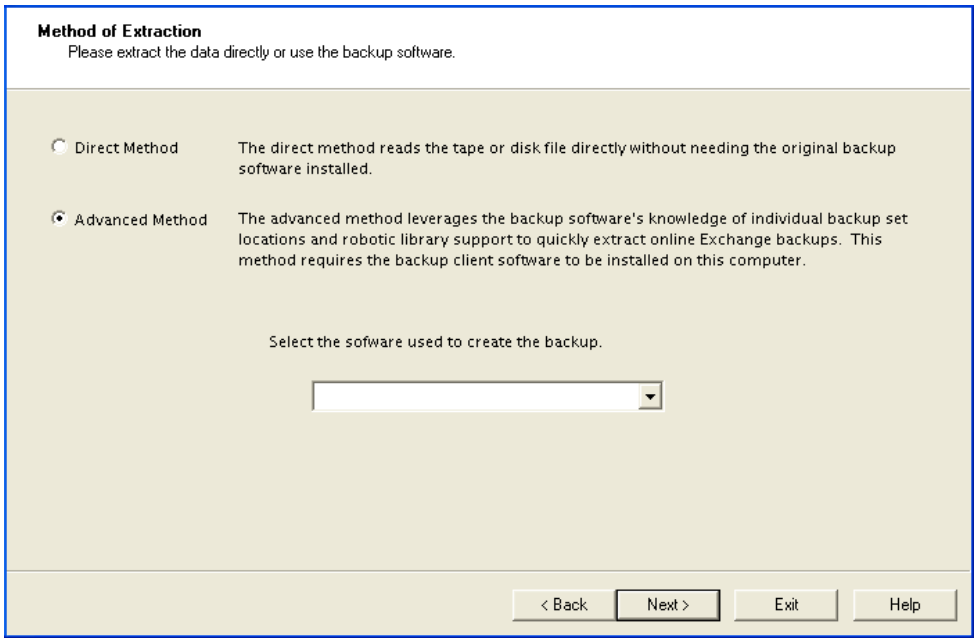
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 6-25. Method of Extraction Page for Advanced Method

6. Select **Symantec Backup Exec** from the drop-down and click **Next**.
7. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option.

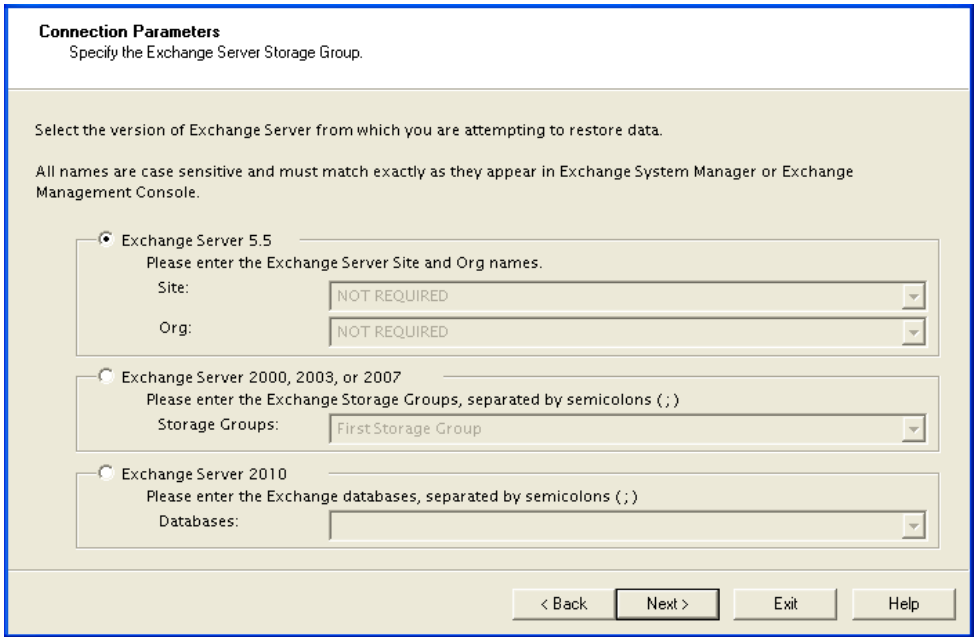
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
Exchange Server 2010
Please enter the Exchange databases, separated by semicolons (;)
Databases:
< Back
Next >
Exit
Help

Figure 6-26. Selecting Exchange Server 5.5 Connection Parameters

8. Click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start Backup Exec. Do not click the **Stop** button until you reach the end of these instructions.

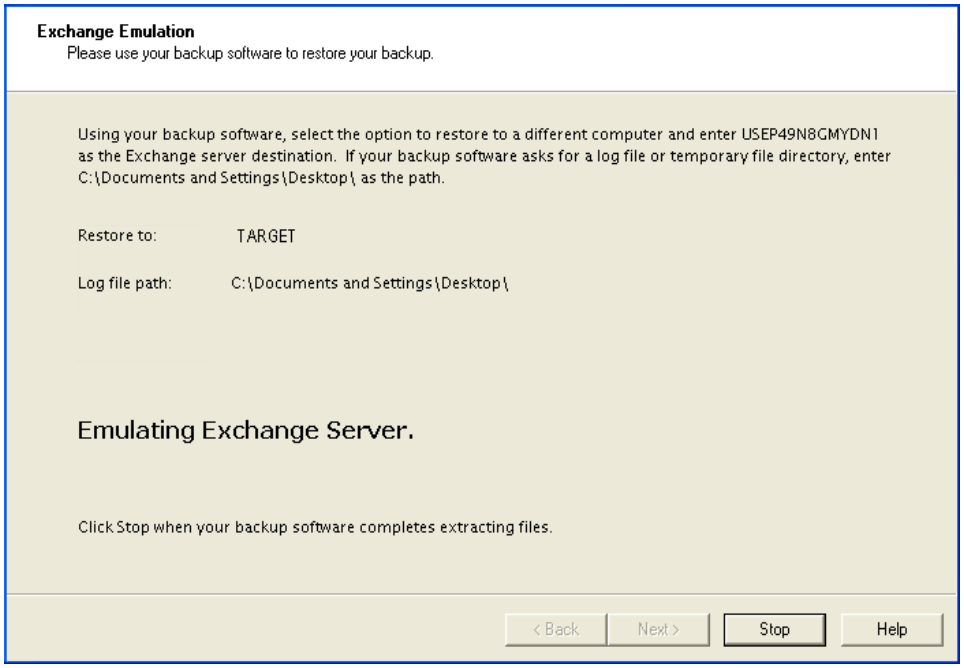
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 6-27. Exchange Emulation Page

Tip: *You can copy the "Restore to" information on this page and paste it into Backup Exec when prompted later in this section.*

11. Start Symantec Backup Exec on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard.
12. Click **Restore** at the top left of the Backup Exec window. The **Restore Job Properties** window appears.
13. In the **Restore Job Properties** window, click the **Selections** tab.
14. In the **All Volumes** tree, select the Exchange backup you want to restore.

    Note: *You cannot restore the Microsoft Exchange Directory.*

15. Click the **Redirection** tab.
16. Select the **Redirect Exchange sets** check box.
17. In the **Restore to server** box, enter the name of the Restore Target Computer. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.

Copyright © 2011 Kroll Ontrack Inc.

18. Select the **Exchange** tab.
19. In the Exchange v5.5 area, clear the **No Loss Restore** check box.

    Important: *If the **No Loss Restore** check box is selected, the restore will fail.*

20. Select one or both of the following check boxes: Select the **Restore public folder** if you would like to restore the pub.edb. Select the **Restore private mailboxes** if you would like to restore the priv.edb.
21. Click **Run Now**. Backup Exec will display a warning about restoring a server with different Site and Organization names. You can safely click **Yes**. Ontrack PowerControls ExtractWizard and Ontrack PowerControls do not depend on the Site and Organization names. Backup Exec will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
22. When Backup Exec is completed, click **OK** and close Backup Exec.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 7

USING THE EXCHANGE EMULATION METHOD - CA ARCSERVE BACKUP

Overview

Use the following steps to use CA ARCserve Backup as your client backup software.

Exchange Emulation for CA ARCserve Backup and Exchange Server 2000/2003

Use the following steps for performing Exchange emulation for CA ARCserve Backup with Exchange Server 2000/2003:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

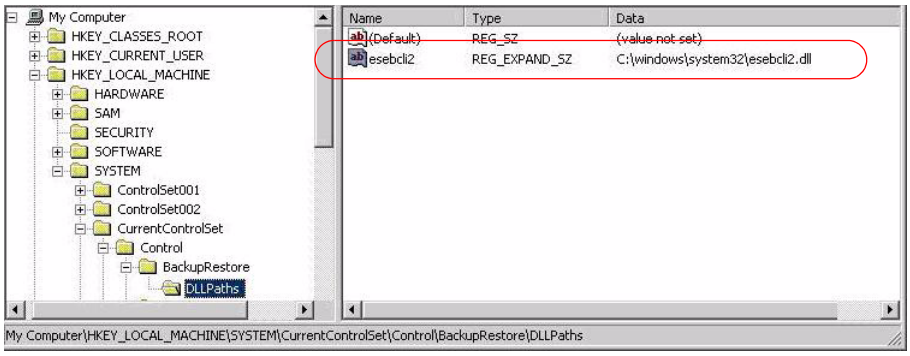

Figure 7-1. Example of Setting the Registry Key

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

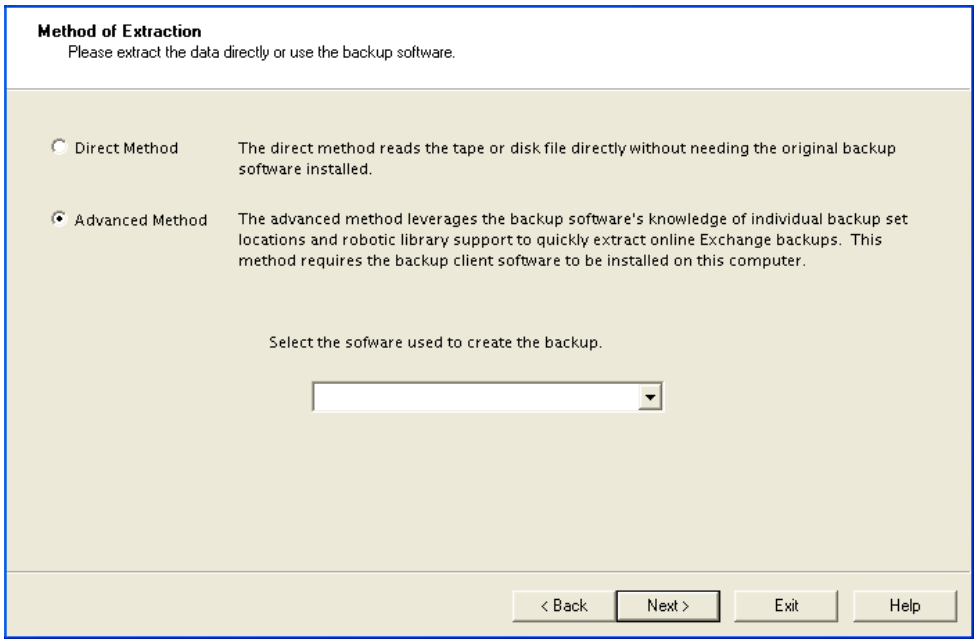
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 7-2. Method of Extraction Page for Advanced Method

5. Select **CA ARCserve Backup** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000 or 2003** option.

Copyright © 2011 Kroll Ontrack Inc.

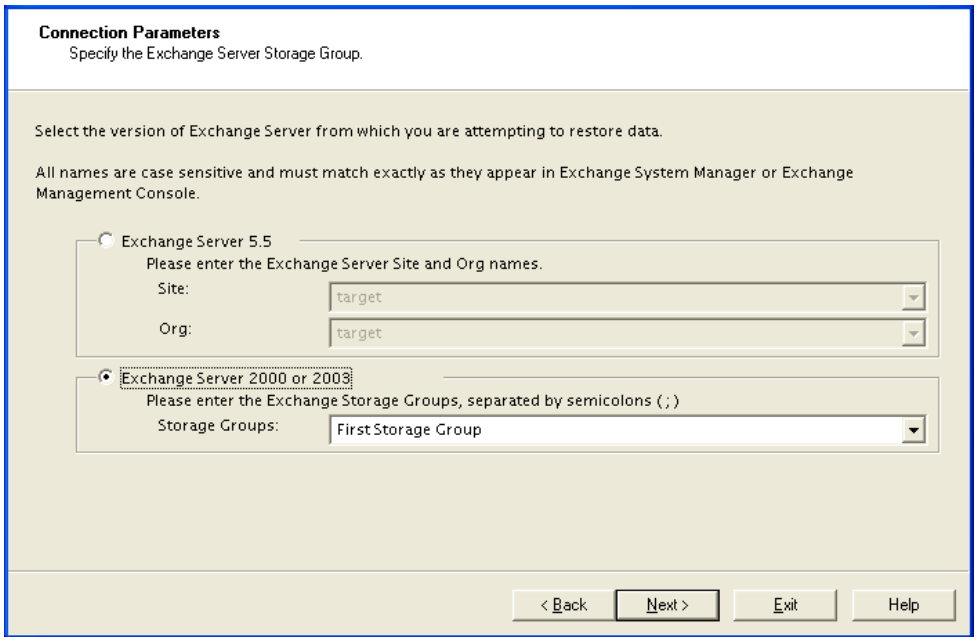
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
target
Org:
target
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
< Back
Next >
Exit
Help

Figure 7-3. Selecting Exchange Server 2000 or 2003 Connection Parameters

7. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly as it appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
8. Click **Next**.
9. If Ontrack PowerControls ExtractWizard displays a warning about the CA ARCserve Exchange client not being properly configured for emulating Exchange Server 2000/2003, click **OK** to continue. You can configure the CA ARCserve Exchange client when you get to step 12 later in this section.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start CA ARCserve Backup. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

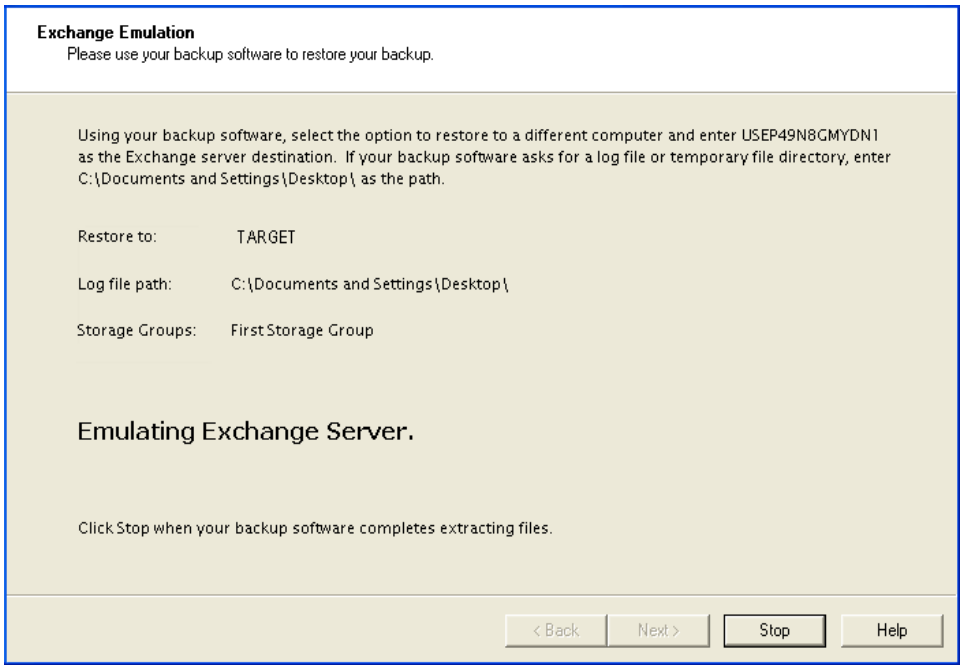
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 7-4. Exchange Emulation Page

Tip: *You can copy the "Restore to" and "Log file path" information on this page and paste it into CA ARCserve Backup when prompted later in this section.*

12. Make sure "CA ARCserve Backup Client Agent for Windows" software and "Backup Agent for Microsoft Exchange" software are installed on the computer running Ontrack PowerControls ExtractWizard.
13. Start CA ARCserve Backup on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **CA ARCserve Backup** window appears.
14. On the **Quick Start** menu, click **Restore**. A Server tree appears in the **Source** tab.
15. In the **Source** tab, select the Exchange backup you want to restore.
16. Right-click the storage group you want to restore and click **Backup Agent Option**. The **Backup Agent Restore Options** window appears.
17. In the **Temporary location for log and path files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. Click **OK** to close the **Backup Agent Restore Options** window.
19. Click the **Destination** Tab.
20. Clear the **Restore files to their original location** check box.

Important: *For the following two steps, use the Network tree. Do not use the Windows NT/2000/XP/2003 Systems tree.*

21. In the **Network** tree, expand the **Microsoft Windows Network** node, and locate the Restore Target Computer. If the Restore Target Computer does not appear, do one or both of the following:

Copyright © 2011 Kroll Ontrack Inc.

- If the domain or workgroup that the Restore Target Computer belongs to does not appear in the Microsoft Windows Network node, right-click the Microsoft Windows Network node and click **Add Machine/Object**. In the **Add Object** window, enter the domain or workgroup and click **Add**.
- If the Restore Target Computer does not appear in the domain or workgroup it belongs to, right-click the domain or workgroup node, and click **Add Machine/Object**. In the **Add Object** window, enter the name of the Restore Target Computer and click Add. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.

22. Expand the Restore Target Computer node and select the **Microsoft Information Store** node.

    Note: *If the **Microsoft Information Store** node does not appear under the Restore Target Computer, select the Restore Target Computer node so that its name appears in the Address box above the Destination tree. Then append \dbaexchis to the Restore Target Computer name. This signals CA ARCserve Backup you are restoring an Information Store.*

23. On the toolbar, click **Start**.
24. If the Remote Agent Security is *not* properly configured, the **Security** window appears. Make sure your Server logon account (User Name and Password) is correct. The account you use must have backup operator rights to the Restore Target Computer.
25. Click **OK**. The **Session User Name and Password** window appears.
26. Verify the session information is correct.
27. Click **OK**. The **Submit Job** window appears.
28. In the **Description** box, enter a description if desired, and click **OK**. CA ARCserve Backup will start to restore Exchange files to the Ontrack PowerControls ExtractWizard.
29. When CA ARCserve Backup is completed, click **OK** and close CA ARCserve Backup.
30. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for CA ARCserve Backup 9.x-11.5 SP3 and Exchange Server 5.5

Use the following steps for performing Exchange emulation for CA ARCserve Backup 9.x-11.5 SP3 with Exchange Server 5.5:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

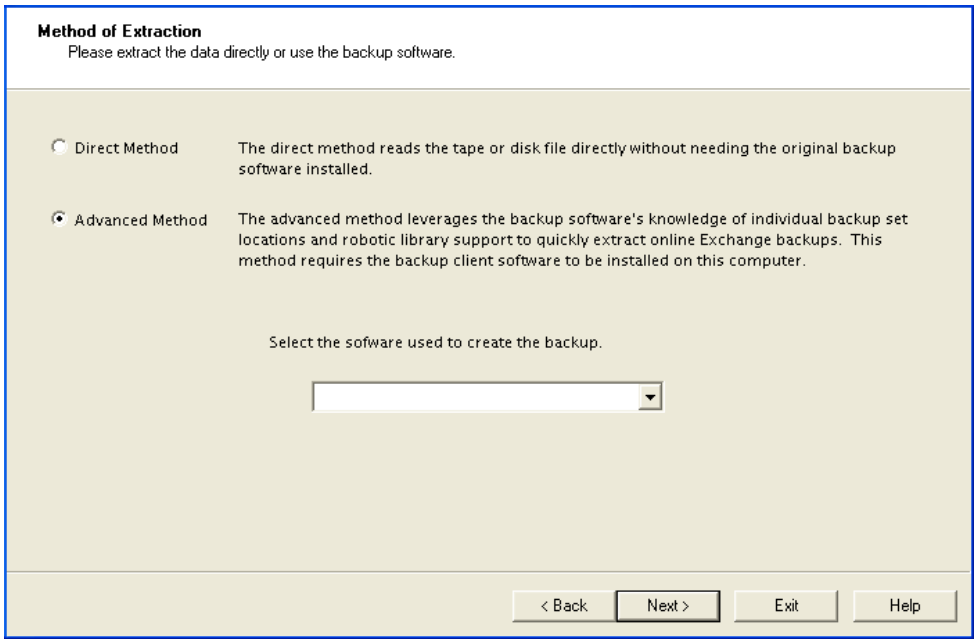
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 7-5. Method of Extraction Page for Advanced Method

5. Select **CA ARCserve Backup** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option.

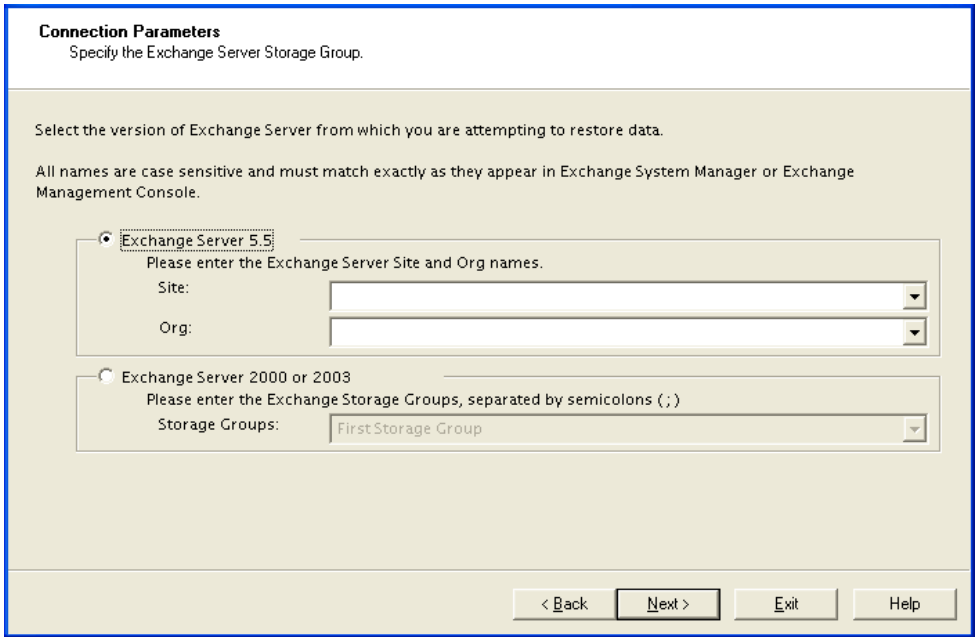
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
Org:
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
First Storage Group
< Back
Next >
Exit
Help

Figure 7-6. Selecting Exchange Server 5.5 Connection Parameters

Copyright © 2011 Kroll Ontrack Inc.

7. In the **Site** and **Org** boxes, enter the Site and Org for the Exchange Information Store files you are preparing to restore. The Site and Org names are case sensitive and must match exactly as they appear in the Exchange System Manager.
8. Click **Next**.
9. If Ontrack PowerControls ExtractWizard displays a warning about the CA ARCserve Backup Exchange client not being properly configured for emulating Exchange 5.5, click **OK** to continue. You can configure the CA ARCserve Backup Exchange client when you get to step 12 later in this section.
10. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
11. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start CA ARCserve Backup. Do not click the **Stop** button until you reach the end of these instructions.

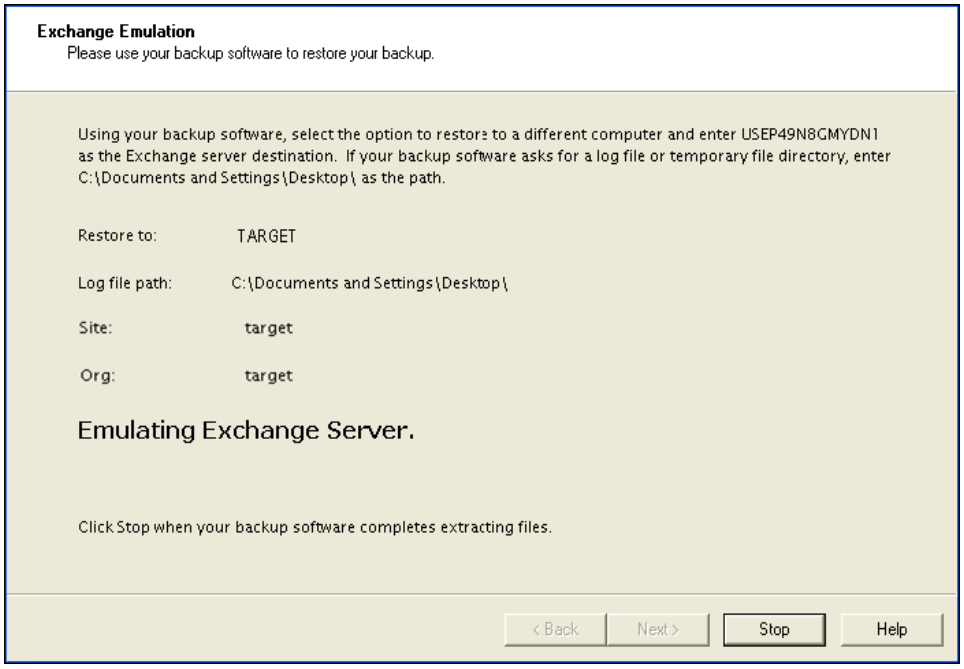
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Site: target
Org: target
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 7-7. Exchange Emulation Page

Tip: *You can copy the "Restore to" and "Log file path" information on this page and paste it into CA ARCserve Backup when prompted later in this section.*

12. Make sure "CA ARCserve Backup Client Agent for Windows" software and "Backup Agent for Microsoft Exchange" software are installed on the computer running Ontrack PowerControls ExtractWizard.
13. If you have already installed the Backup Agent for Exchange Server 2000/2003 and you want to emulate Exchange Server 5.5, you must do one of the following:

Copyright © 2011 Kroll Ontrack Inc.

- **Option 1:** Reinstall the Backup Agent for Microsoft Exchange with Ontrack PowerControls ExtractWizard, running the correct emulation type.
- **Option 2:** Manually edit the registry setting for the CA ARCserve Backup Exchange client. Make sure the following key exists: **HKEY_LOCAL_MACHINE\SOFTWARE\ComputerAssociates\BrightStor ARCserve Backup\DSAgent\CurrentVersion\agent\dbaexch**.

  In these keys, make sure the **REG_DWORD** value **"isExch2000"** does *not* exist.

Important: *If **REG_DWORD** value **"isExch2000"** exists, delete it.*

14. Start CA ARCserve Backup on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **CA ARCserve Backup** window appears.
15. On the **Quick Start** menu, click **Restore**. A Server tree appears in the **Source** tab.
16. Select the Exchange backup you want to restore.

    Note: *You cannot restore the Directory.*

17. Click the **Destination** tab.
18. Clear the **Restore files to their original location** check box.

    Important: *For the following two steps, use the **Network** tree. Do not use the **Windows NT/2000/XP/2003 Systems** tree.*

19. In the **Network** tree, expand the **Microsoft Windows Network** node, and locate the Restore Target Computer. If the Restore Target Computer does not appear, do one or both of the following:
    - If the domain or workgroup that the Restore Target Computer belongs to does not appear in the Microsoft Windows Network node, right-click the Microsoft Windows Network node and click **Add Machine/Object**. In the **Add Object** window, enter the domain or workgroup and click **Add**.
    - If the Restore Target Computer does not appear in the domain or workgroup it belongs to, right-click the domain or workgroup node, and click **Add Machine/Object**. In the **Add Object** window, enter the name of the Restore Target Computer and click Add. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
20. Expand the Restore Target Computer node and select the **Microsoft Exchange Server** node.

    Note: *If the **Microsoft Exchange Server** node does not appear under the Restore Target Computer, select the Restore Target Computer node so that its name appears in the Address box above the Destination tree. Then append \dbaexch to the Restore Target Computer name. This signals CA ARCserve Backup you are restoring an Information Store.*

21. On the toolbar, click **Start**.
22. If the Remote Agent Security is *not* properly configured, the Security window appears. Make sure your Server logon account (User Name and Password) is correct. The account you use must have backup operator rights to the Restore Target Computer.
23. Click **OK**. The **Session User Name and Password** window appears.

Copyright © 2011 Kroll Ontrack Inc.

24. Verify the session information is correct.
25. Click **OK**. The **Submit Job** window appears.
26. In the **Description** box, enter a description if desired, and click **OK**. CA ARCserve Backup starts to restore Exchange files to the Ontrack PowerControls ExtractWizard.
27. When CA ARCserve Backup is completed, click **OK** and close CA ARCserve Backup.
28. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 8

USING THE EXCHANGE EMULATION METHOD - NETBACKUP

Overview

Use the following steps to use NetBackup as your client backup software.

Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 2000/2003

Note: *For NetBackup 4.5, you must install the NetBackup client and the Exchange agent on the computer running Ontrack PowerControls ExtractWizard.*

Use the following steps for performing Exchange emulation for NetBackup 4.5-5.1 with Exchange Server 2000/2003:

1. Install NetBackup client software for Windows on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Allow the computer running Ontrack PowerControls ExtractWizard to restore backups created by the Exchange Server client. Follow the instructions for allowing redirected restores in the NetBackup Administrators Guide.
3. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore\DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Copyright © 2011 Kroll Ontrack Inc.

Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

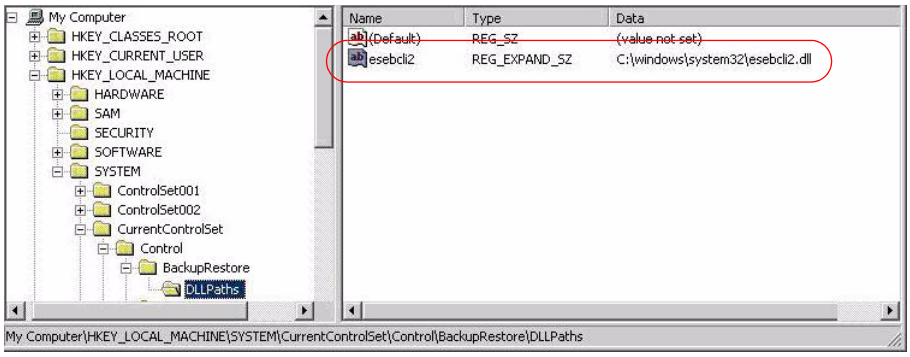

Figure 8-1. Example of Setting the Registry Key

4. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
5. Click **Next**.
6. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

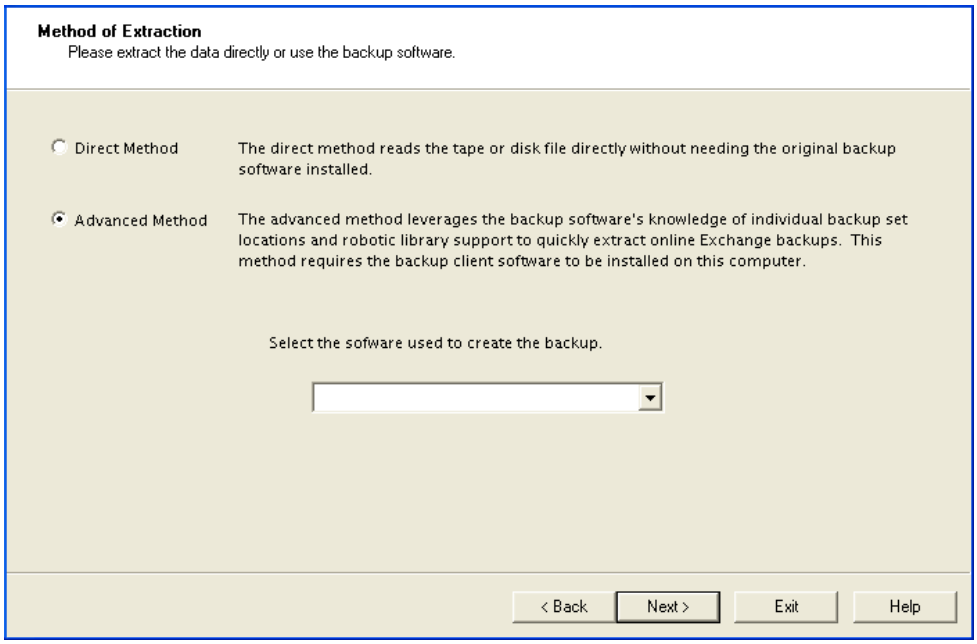
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 8-2. Method of Extraction Page for Advanced Method

7. Select **NetBackup** from the drop-down and click **Next**.
8. In the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

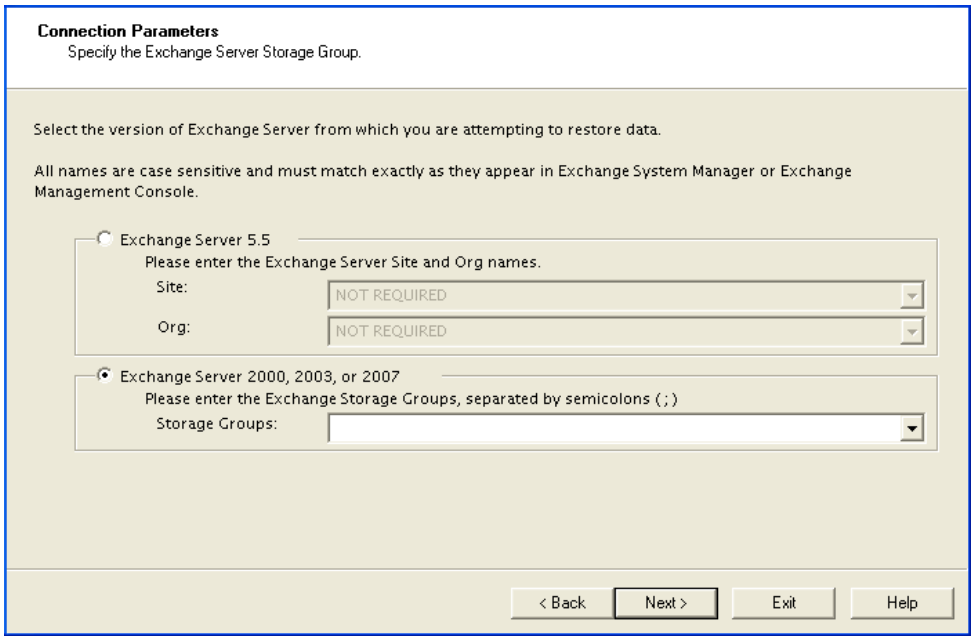
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
< Back
Next >
Exit
Help

Figure 8-3. Selecting Exchange Server 2000, 2003, 2007Connection Parameters

9. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
10. Click **Next**.
11. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
12. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NetBackup. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

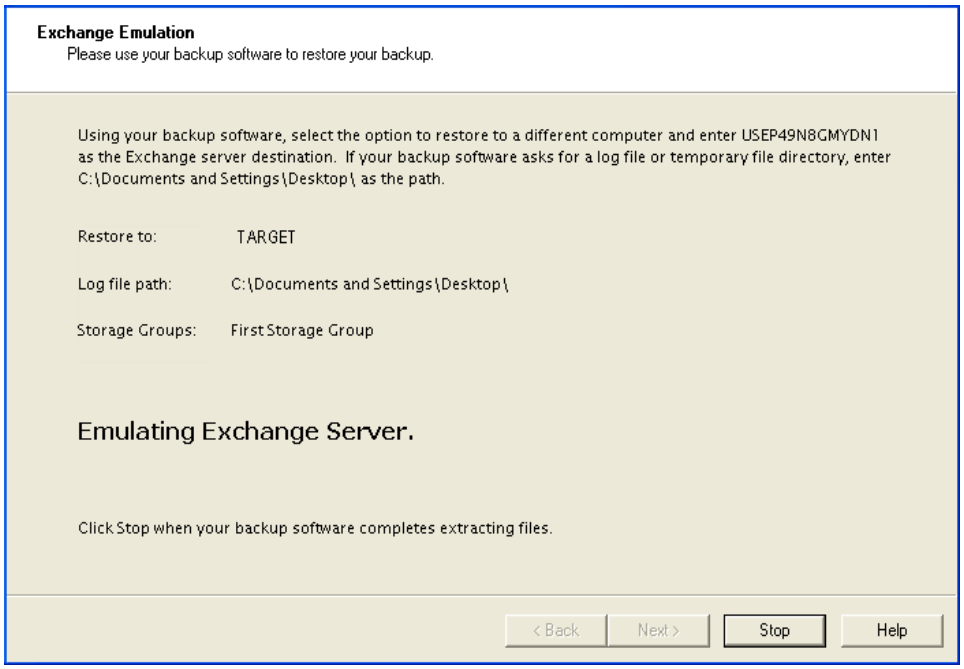
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 8-4. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into NetBackup when prompted later in this section.*

13. Start the NetBackup client on the computer running Ontrack PowerControls ExtractWizard.
14. On the **File** menu, click **Specify NetBackup Machines and Policy Type**. (For NetBackup 4.5, click **Specify NetBackup Machines**.)

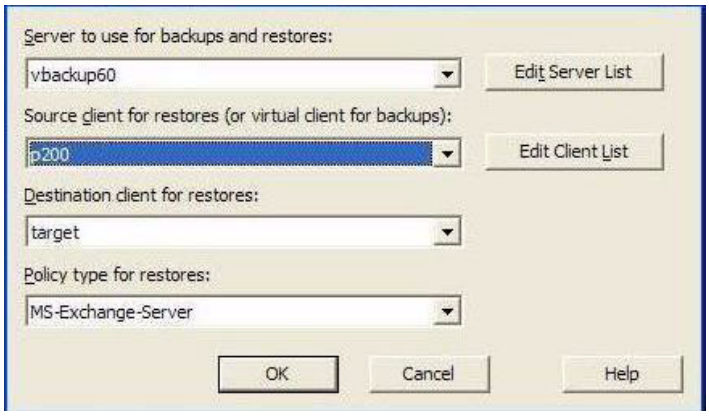

Figure 8-5. Specify the client and policy type

15. In the **Specify NetBackup Machines and Policy Type** window, click the **Client/Policy Type** tab.
16. Under **Client List**, select the Exchange client you want to restore from and make it the current client. Click **OK**.

Copyright © 2011 Kroll Ontrack Inc.

17. On the toolbar, click **Select for Restore**, and then select the Exchange backup you want to restore.
18. On the **Actions** menu, click **Start Restore of Marked Files**.
19. In the **Restore Marked Files** window, clear the **Commit after restore completes** check box.

    Caution: *If the **Commit after restore completes** check box is selected, NetBackup will automatically delete the restored files after completing the restore.*

20. In the **Temporary location for log and patch files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
21. Click **Start Restore**.
22. When NetBackup is completed, click **OK** and close NetBackup.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 5.5

Note: *For NetBackup 4.5, you must install the NetBackup client and the Exchange agent on the computer running Ontrack PowerControls ExtractWizard.*

Use the following steps for performing Exchange emulation for NetBackup 4.5-5.1 with Exchange Server 5.5:

1. Install NetBackup client software for Windows on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Allow the computer running Ontrack PowerControls ExtractWizard to restore backups created by the Exchange Server client. Follow the instructions for allowing redirected restores in the NetBackup Administrators Guide.
3. On the computer running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
4. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
5. Click **Next**.
6. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

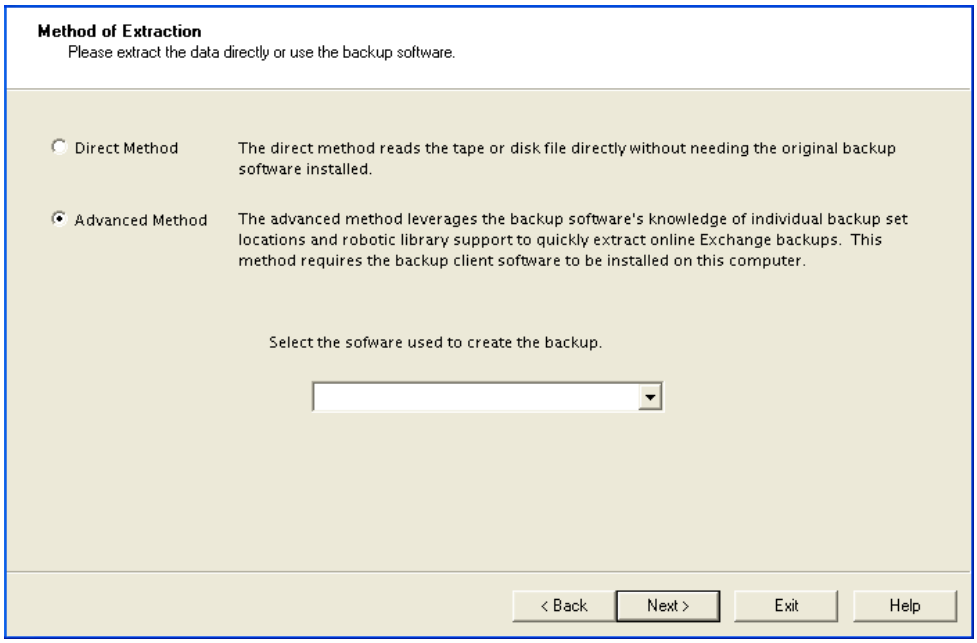
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 8-6. Method of Extraction Page for Advanced Method

7. Select **NetBackup** from the drop-down and click **Next**.
8. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option and click **Next**.

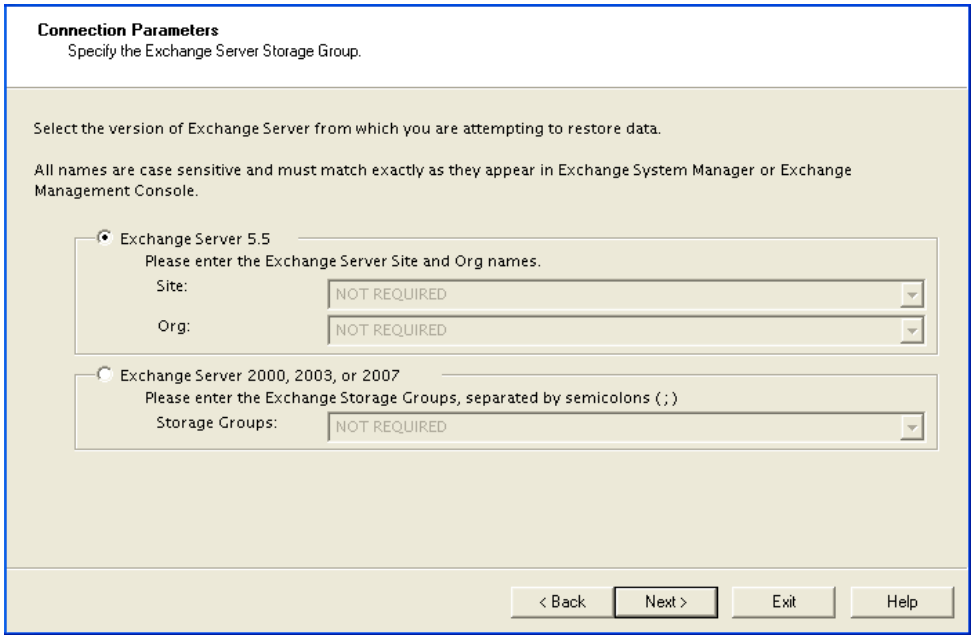
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 8-7. Selecting Exchange Server 5.5 Connection Parameters

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
10. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NetBackup. Do not click the **Stop** button until you reach the end of these instructions.

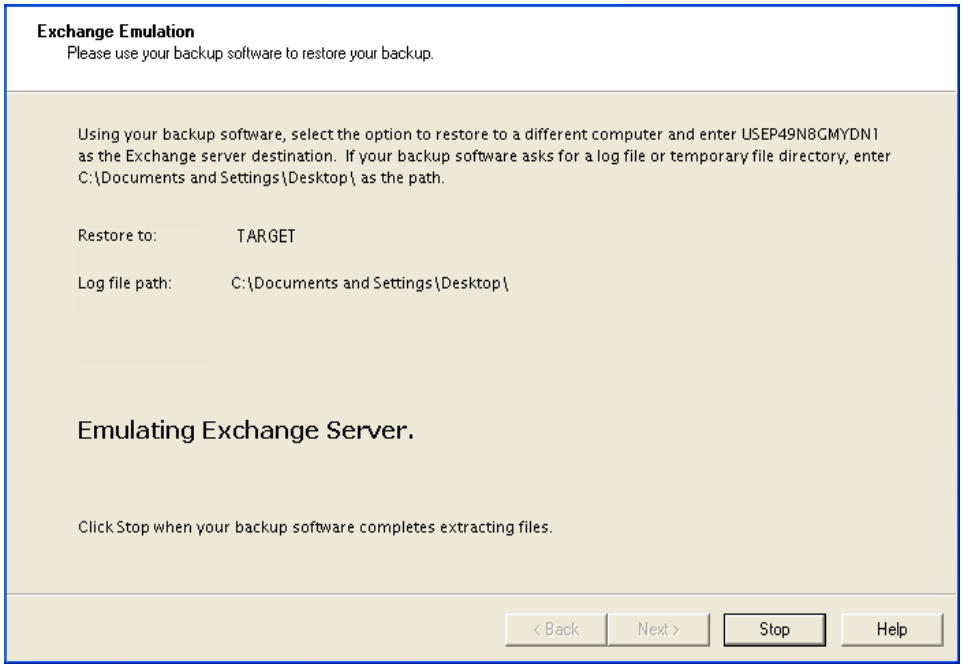
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 8-8. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into NetBackup when prompted later in this section.*

11. Start the NetBackup client on the computer running Ontrack PowerControls ExtractWizard.
12. On the **File** menu, click **Specify NetBackup Machines and Policy Type**. (For NetBackup 4.5, click **Specify NetBackup Machines**.)

Copyright © 2011 Kroll Ontrack Inc.

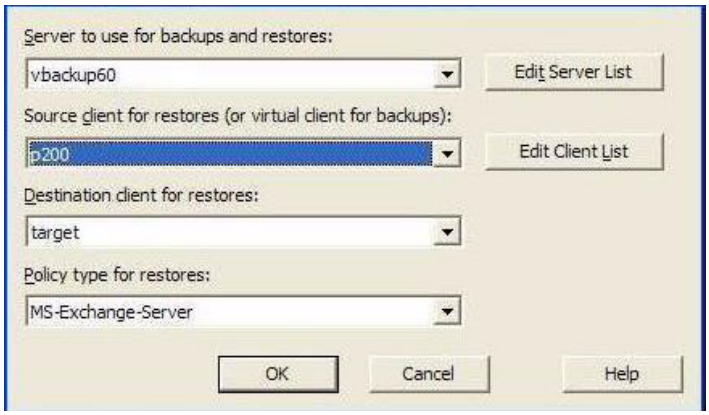

Figure 8-9. Specify client and policy type

13. In the **Specify NetBackup Machines and Policy Type** window, click the **Client/Policy Type** tab.
14. Under **Client List**, select the Exchange client you want to restore from and make it the current client. Click **OK**.
15. On the toolbar, click **Select for Restore**, and then select the Exchange backup you want to restore.
16. On the **Actions** menu, click **Start Restore of Marked Files**.
17. In the **Restore Marked Files** window, click **Start Restore**.
18. When NetBackup is completed, click **OK** and close NetBackup.
19. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NetBackup 6.0 and Exchange Server 2000/2003

Use the following steps for performing Exchange emulation for NetBackup 6.0 with Exchange Server 2000/2003:

1. Install NetBackup client software for Windows on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Allow the computer running Ontrack PowerControls ExtractWizard to restore backups created by the Exchange Server client. Follow the instructions for allowing redirected restores in the NetBackup Administrators Guide.
3. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore**

Copyright © 2011 Kroll Ontrack Inc.

\DLLPaths with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

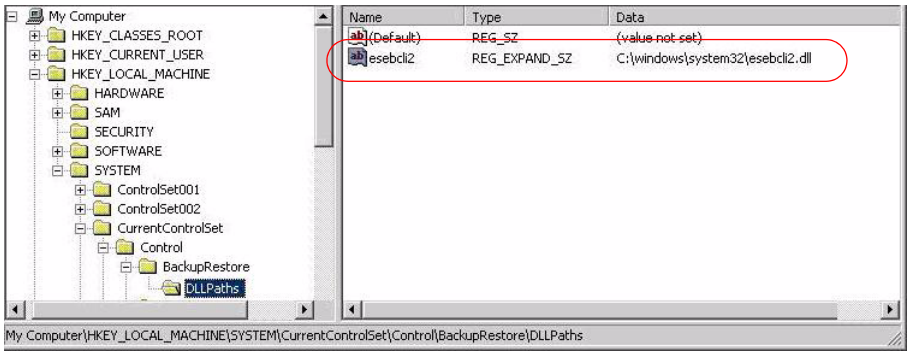

Figure 8-10. Example of Setting the Registry Key

4. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
5. On the first page of the Ontrack PowerControls ExtractWizard, click **Next**.
6. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

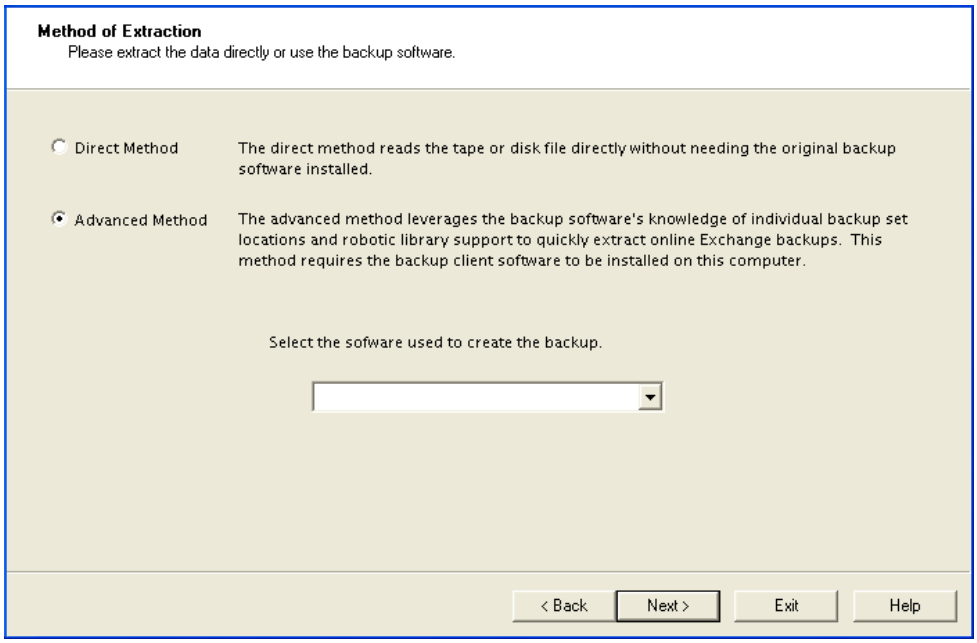
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 8-11. Method of Extraction Page for Advanced Method

7. Select **NetBackup** from the drop-down and click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

8. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

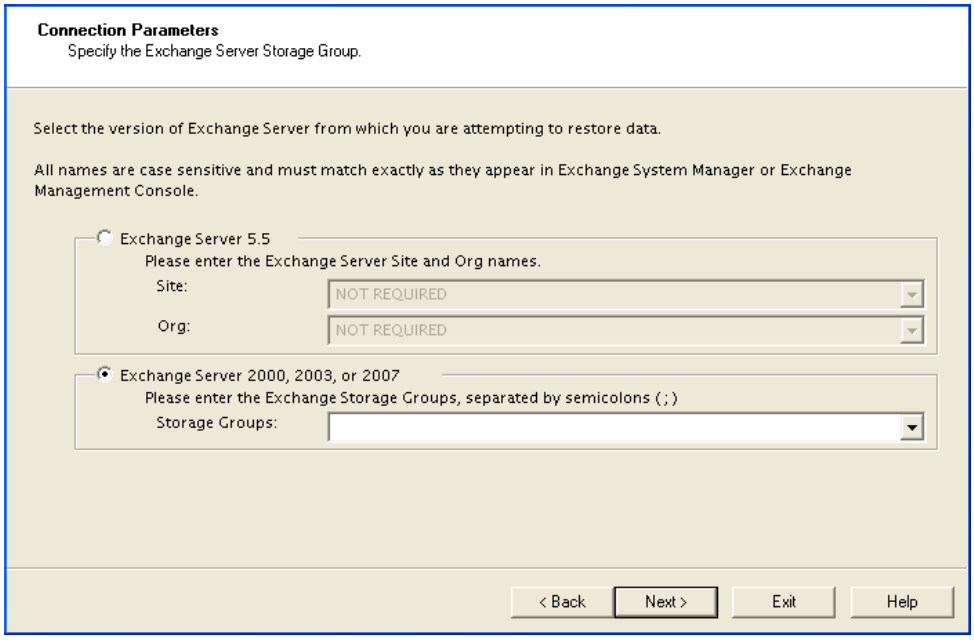
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
< Back
Next >
Exit
Help

Figure 8-12. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

9. In the **Storage Groups** box, enter the name of the storage group you will be extracting. The storage group name is case sensitive and must match exactly the name that appears in the Exchange System Manager. You can enter multiple storage groups, separated by semicolons (;).
10. Click **Next**.
11. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
12. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NetBackup. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

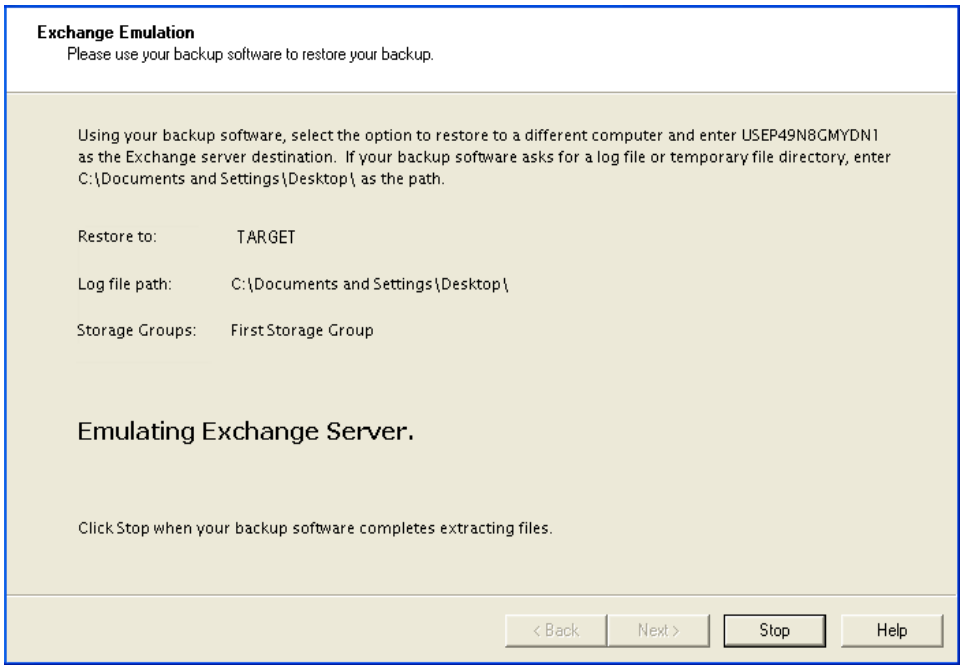
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 8-13. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into NetBackup when prompted later in this section.*

13. Start the NetBackup client on the computer running Ontrack PowerControls ExtractWizard.
14. On the **File** menu, select **Specify NetBackup Machines and Policy Type**.

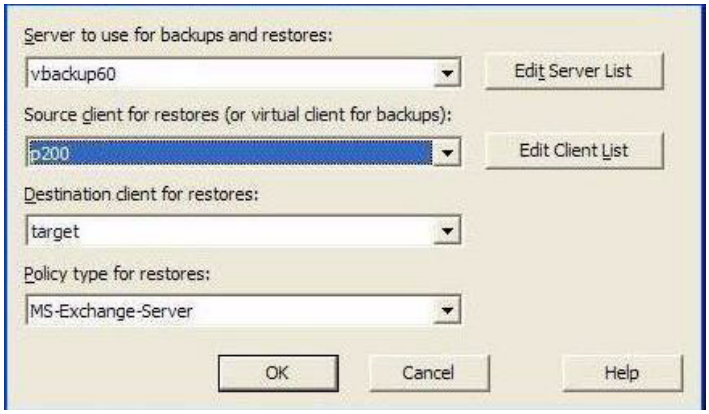

Figure 8-14. Specify client and policy type

15. In the **Specify NetBackup Machines and Policy Type** window, locate the **Source client for restores (or virtual client for backups)** drop-down and select the Exchange client you want to restore from and make it the current client.
16. In the **Policy type for restores** drop-down, change the default to **MS-Exchange-Server.** Click **OK**.

Copyright © 2011 Kroll Ontrack Inc.

17. On the toolbar, click **Select for Restore**, and then select the Exchange backup you want to restore.
18. On the **Actions** menu, click **Start Restore of Marked Files**.
19. In the **Restore Marked Files** window, clear the **Commit after restore completes** check box.

    Caution: *If the **Commit after restore completes** check box is selected, NetBackup will automatically delete the restored files after completing the restore.*

20. In the **Temporary location for log and patch files** box, enter the log file path. Verify that you are using the "Log file path" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
21. Click **Start Restore**.
22. When NetBackup is completed, click **OK** and close NetBackup.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NetBackup 6.0 and Exchange Server 5.5

Use the following steps for performing Exchange emulation for NetBackup 6.0 with Exchange Server 5.5:

1. Install NetBackup client software for Windows on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Allow the computer running Ontrack PowerControls ExtractWizard to restore backups created by the Exchange Server client. Follow the instructions for allowing redirected restores in the NetBackup Administrators Guide.
3. On the computer running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
4. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
5. On the first page of the Ontrack PowerControls ExtractWizard, click **Next**.
6. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

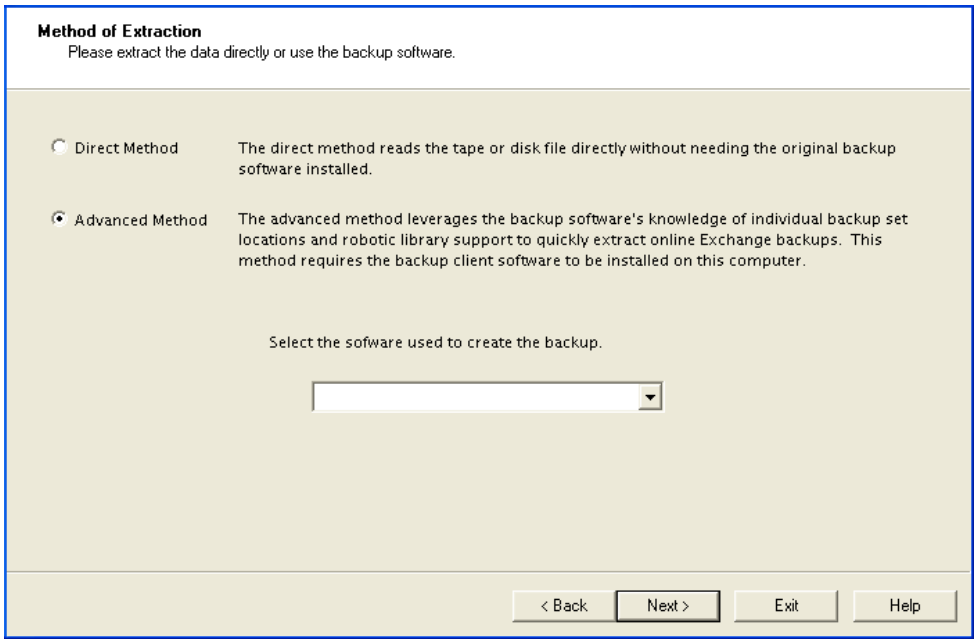
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 8-15. Method of Extraction Page for Advanced Method

7. Select **NetBackup** from the drop-down and click **Next**.
8. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option and click **Next**.

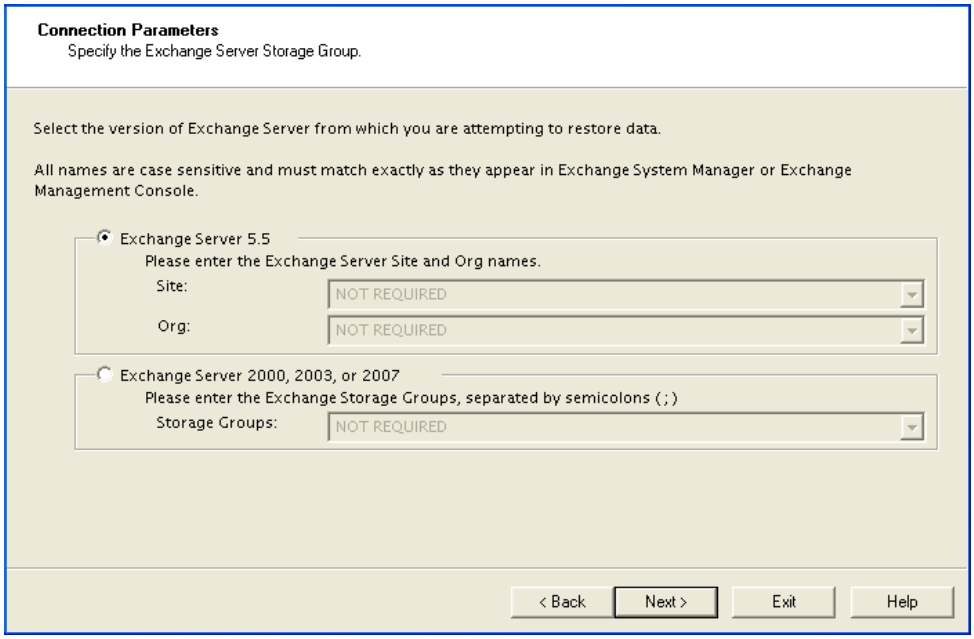
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 8-16. Selecting Exchange Server 5.5 Connection Parameters

Copyright © 2011 Kroll Ontrack Inc.

9. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it). Click **Next**.
10. Click **Next**.
    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start NetBackup. Do not click the **Stop** button until you reach the end of these instructions.

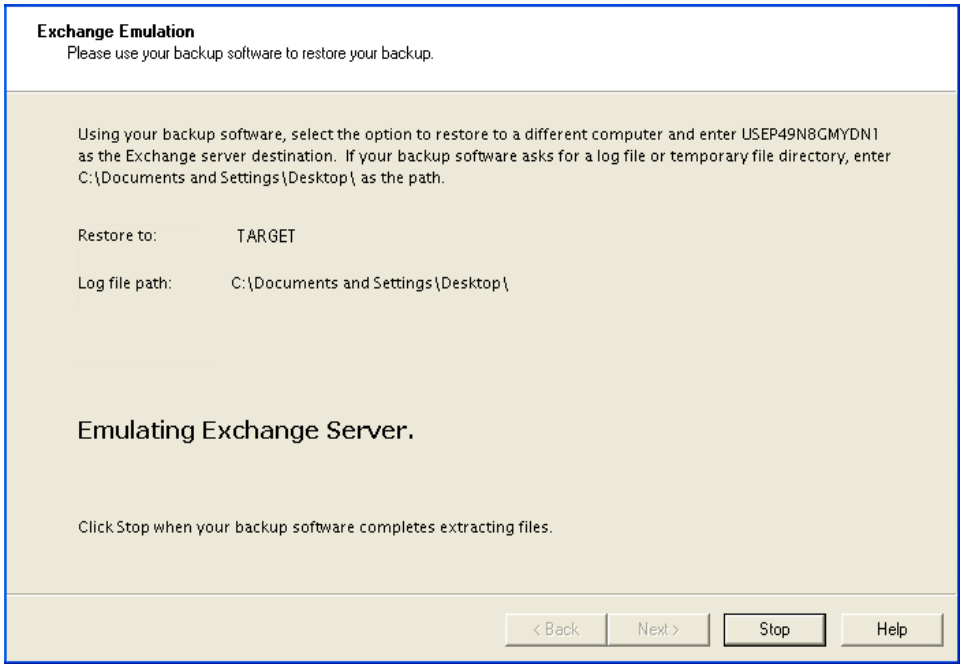
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 8-17. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into NetBackup when prompted later in this section.*

11. Start the NetBackup client on the computer running Ontrack PowerControls ExtractWizard.
12. On the **File** menu, click **Specify NetBackup Machines and Policy Type**.

Copyright © 2011 Kroll Ontrack Inc.

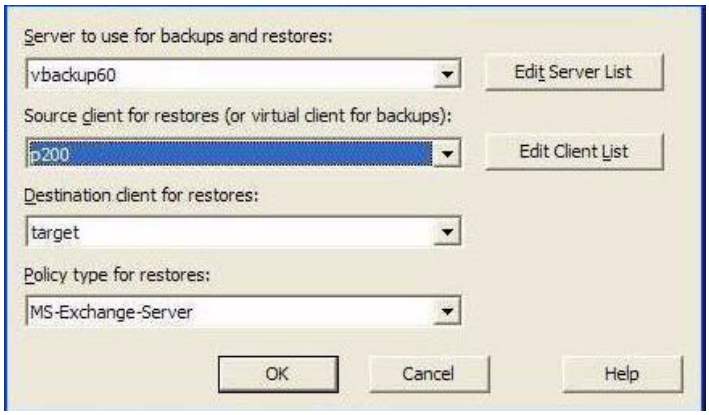

Figure 8-18. Specify client and policy type

13. In the **Specify NetBackup Machines and Policy Type** window, locate the **Source client for restores (or virtual client for backups)** drop-down and select the Exchange client you want to restore from and make it the current client.
14. In the **Policy type for restores** drop-down, change the default to **MS-Exchange-Server.** Click **OK**.
15. On the toolbar, click **Select for Restore**, and then select the Exchange backup you want to restore.
16. On the **Actions** menu, click **Start Restore of Marked Files**.
17. In the **Restore Marked Files** window, click **Start Restore**.
18. When NetBackup is completed, click **OK** and close NetBackup.
19. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for NetBackup 6.5.x and 7.0 and Exchange Server 2000/2003/2007

Note: *NetBackup 6.5.4 and later must be run on a 32-bit (x86) edition of Windows. NetBackup 6.5.4 and later running on a 64-bit (x64) operating system are not supported for Advanced Method.*

Use the following steps for performing Exchange emulation for NetBackup 6.5.x and 7 backups with Exchange Server 2000, 2003, and 2007:

1. Install NetBackup client software for Windows on the computer that will be running Ontrack PowerControls ExtractWizard.
2. Follow the instructions for allowing redirected restores in the NetBackup Administrators Guide. (This allows the computer running Ontrack PowerControls ExtractWizard to restore backups created by the Exchange Server.)
3. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools for the appropriate version of Microsoft Exchange:

Copyright © 2011 Kroll Ontrack Inc.

For Microsoft Exchange 2003*: Install the Exchange System Management Tools for Exchange 2003 and update the system path to include the Exchsrvr\bin\ directory.*

For Microsoft Exchange 2007*: Install the Exchange Server 2007 Management Tools and update the system path to include the Microsoft\Exchange Server\bin\ directory.*

- **Option 2:** Copy the esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

  Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Note: *For NetBackup 6.5.x (other than version 6.5.4 and later) running on 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

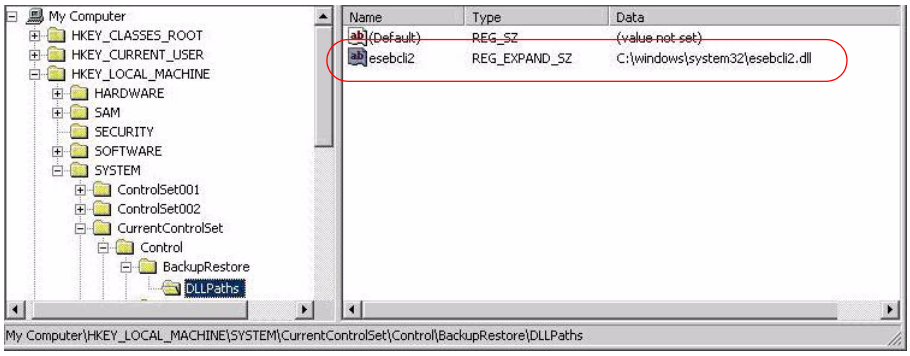

Figure 8-19. Example of Setting the Registry Key

4. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
5. On the first page of the Ontrack PowerControls ExtractWizard, click **Next**.
6. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

Copyright © 2011 Kroll Ontrack Inc.

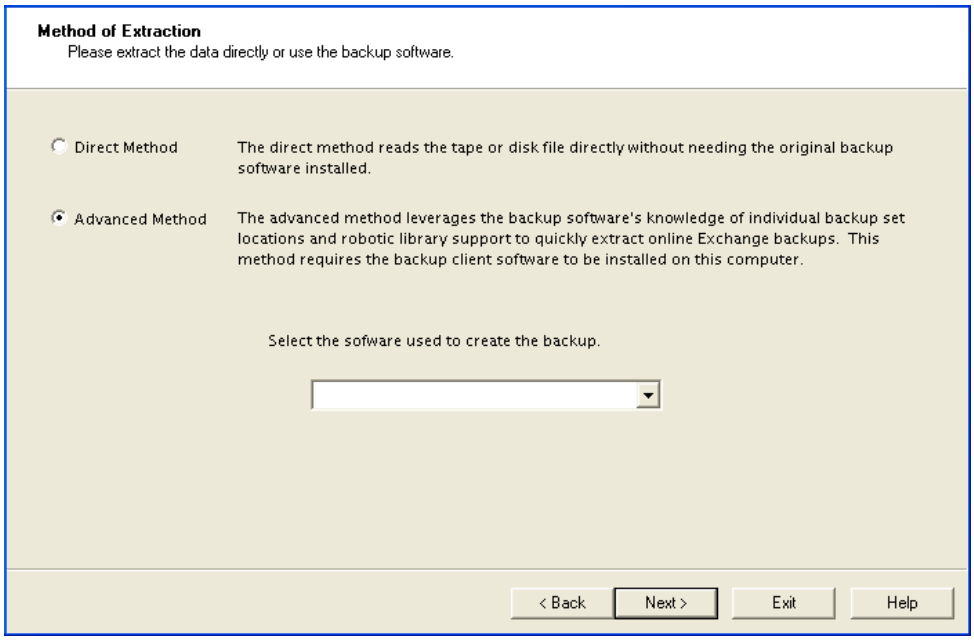
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 8-20. Method of Extraction Page for Advanced Method

7. Select **NetBackup** from the drop-down list and then click **Next**.
8. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000, 2003, or 2007** option.

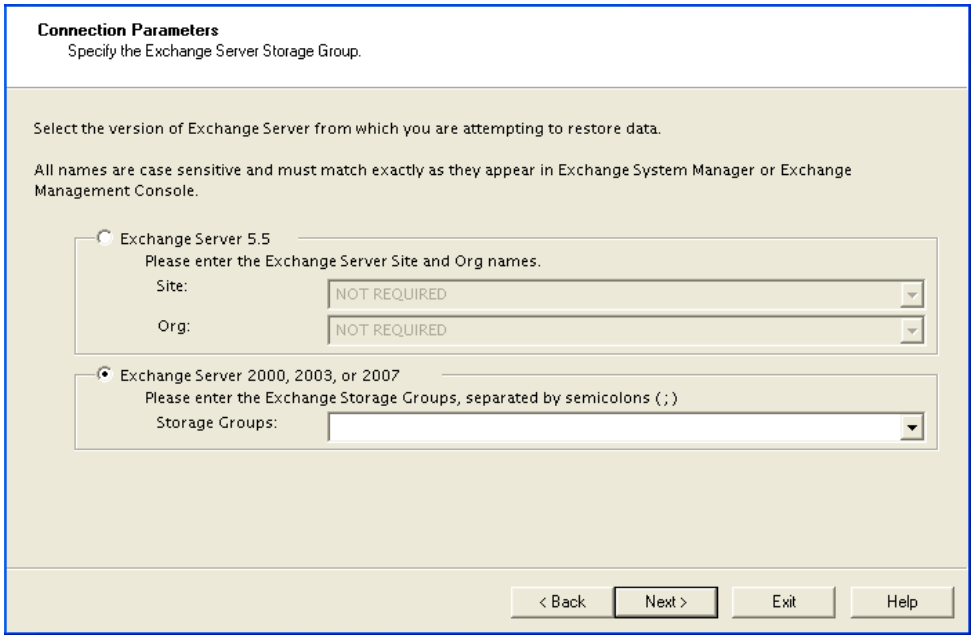
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000, 2003, or 2007
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
< Back
Next >
Exit
Help

Figure 8-21. Selecting Exchange Server 2000, 2003, or 2007 Connection Parameters

Copyright © 2011 Kroll Ontrack Inc.

9. In the **Storage Groups** box, enter the name of the storage group you want to extract. The storage group name is case sensitive and must match exactly the name that appears in the management console for Exchange Server. You can enter multiple storage groups, separated by semicolons (;).
10. Click **Next**.
11. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, use the **Destination Folder** box to specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it, such as x$, and Path is the complete path to a folder. (If a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it.)
12. Click **Next**.

    When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to continue to the next step.

    Important: *Do not click the* ***Stop*** *button or close the Exchange Emulation page until you reach the end of these instructions.*

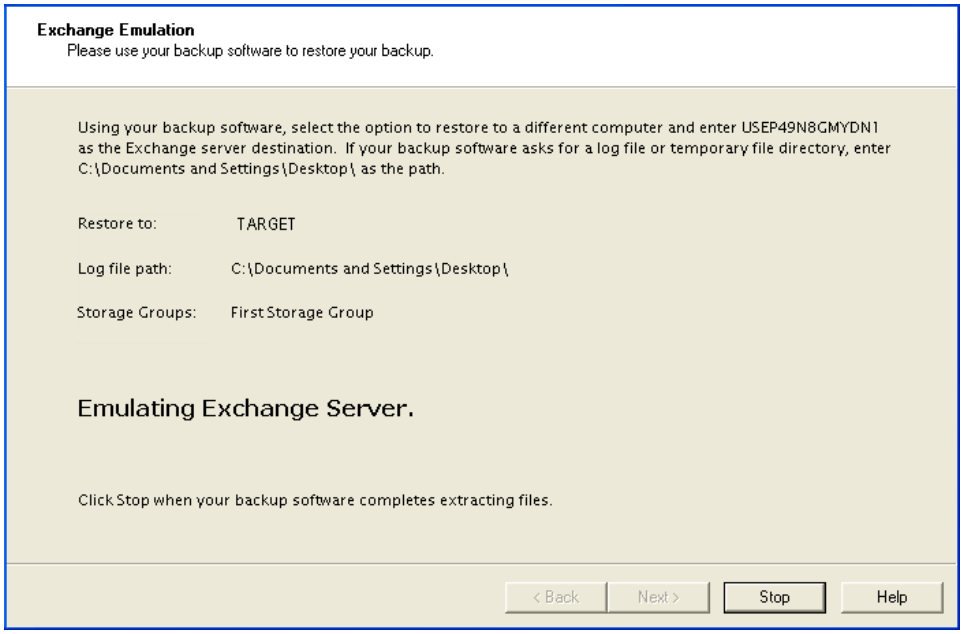
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Storage Groups: First Storage Group
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 8-22. Exchange Emulation Page

Tip: *Copy the "Log file path" information on this page and paste it when prompted later in this section.*

13. Start the NetBackup client software on the computer running Ontrack PowerControls ExtractWizard.
14. On the **File** menu, click **Specify NetBackup Machines and Policy Type**.

Copyright © 2011 Kroll Ontrack Inc.

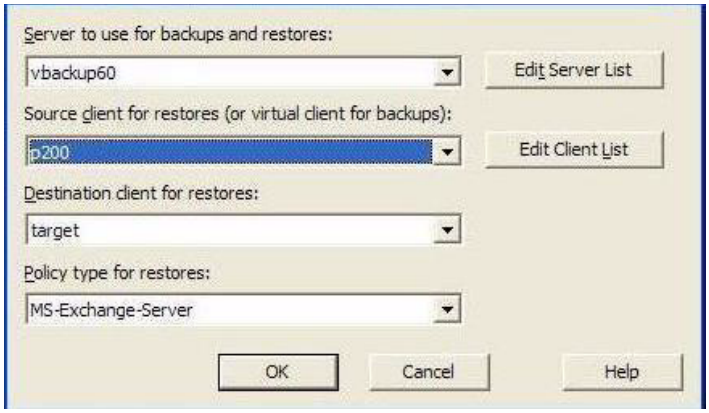

Figure 8-23. Specify Client and Policy Type

15. In the **Specify NetBackup Machines and Policy Type** window, use the **Source client for restores (or virtual client for backups)** list to select the client for the Exchange Server you want to restore from and make it the current client.
16. In the **Policy type for restores** list, select **MS-Exchange-Server** and then click **OK**.
17. On the toolbar, click **Select for Restore**, and then select the backup set for the Exchange Server you want to restore.
18. From the **Actions** menu, select **Start Restore of Marked Files**.
19. Under the **General** tab of **Restore Marked Files**, make sure the default of **Restore everything to its original location** selected.
20. Under the **Microsoft Exchange** tab of **Restore Marked Files**, do the following:
    - Select the **Roll-Forward Recovery (Replay all log files)** option.
    - **For NetBackup 6.5.x**, use the **Temporary location for log and patch files** box to enter the same information you entered in the Ontrack PowerControls ExtractWizard **Destination Folder** box.
    - **For Net Backup 7.0**, use the **Temporary location for log files** box to enter the same information you entered in the Ontrack PowerControls ExtractWizard **Destination Folder** box.
    - Make sure **Commit after last backup set is restored** is not selected.

    Important: *Clear this box or NetBackup will restore the files and then delete them.*

21. Click **Start Restore**.
22. When NetBackup is completed, click **OK** and close NetBackup.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 9

USING THE EXCHANGE EMULATION METHOD - COMMVAULT GALAXY BACKUP & RECOVERY

Overview

Use the following steps to use CommVault Galaxy Backup & Recovery as your client backup software.

Exchange Emulation for CommVault Galaxy Backup & Recovery 6.1, 7.0, 8.0 and Exchange Server 2007

Important: *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*

Use the following steps for performing Exchange emulation for CommVault Galaxy Backup & Recovery 6.1, 7.0, 8.0 with Exchange Server 2007:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Copyright © 2011 Kroll Ontrack Inc.

Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

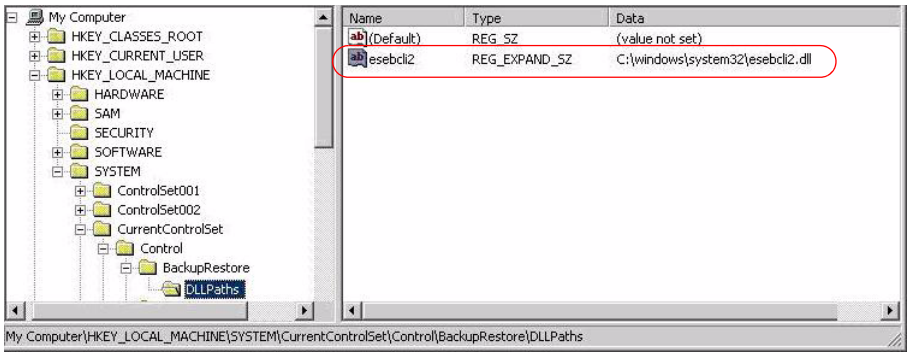

Figure 9-1. Example of Setting the Registry Key

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

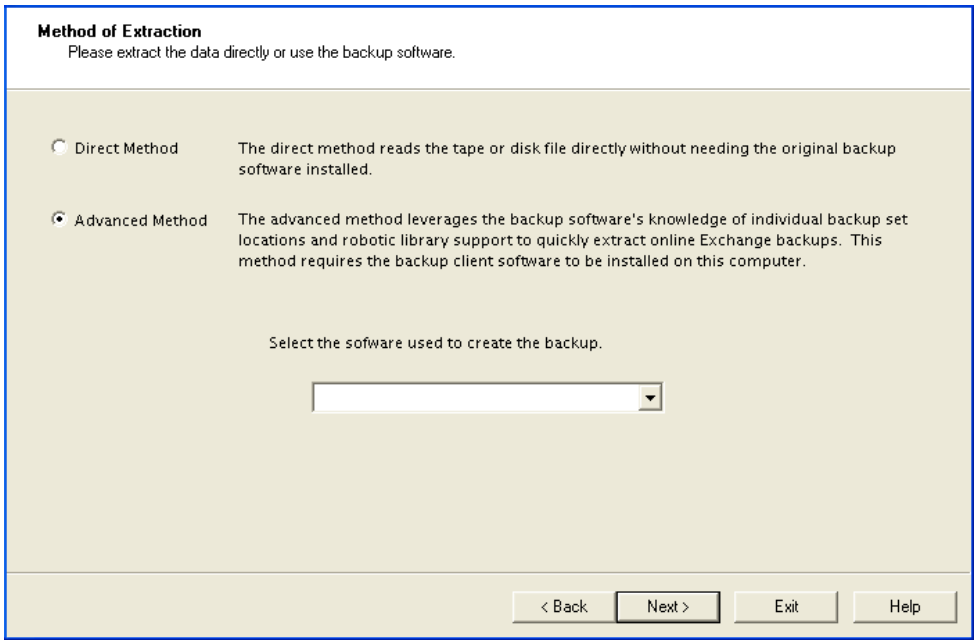
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 9-2. Method of Extraction Page for Advanced Method

5. Select **CommVault Galaxy Backup & Recovery** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2007** option.

Copyright © 2011 Kroll Ontrack Inc.

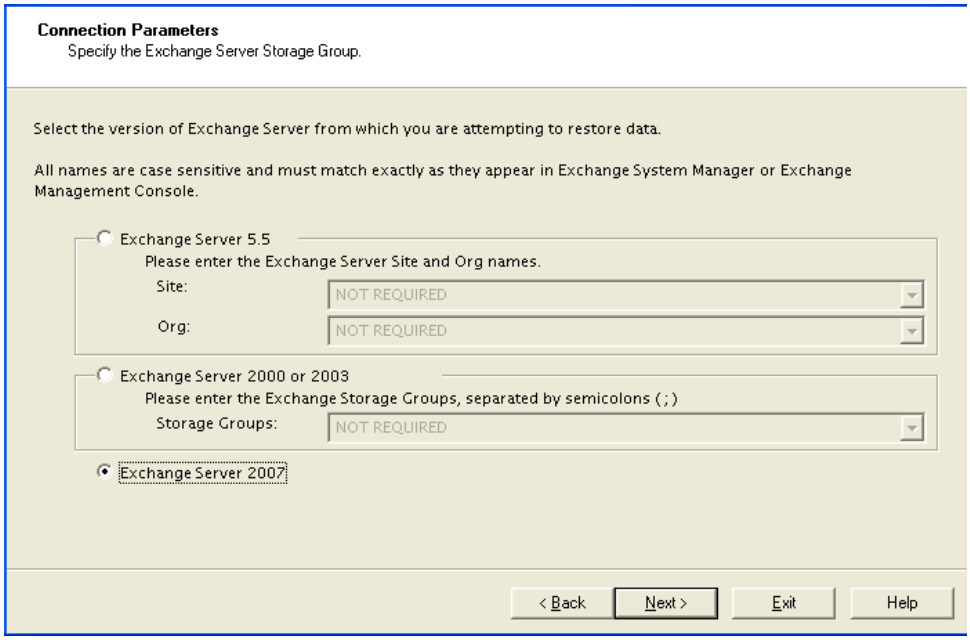
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
Exchange Server 2007
< Back
Next >
Exit
Help

Figure 9-3. Selecting Exchange Server 2007 Connection Parameters

7. Click **Next**.
8. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
9. Click **Next**.
   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start CommVault Galaxy. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

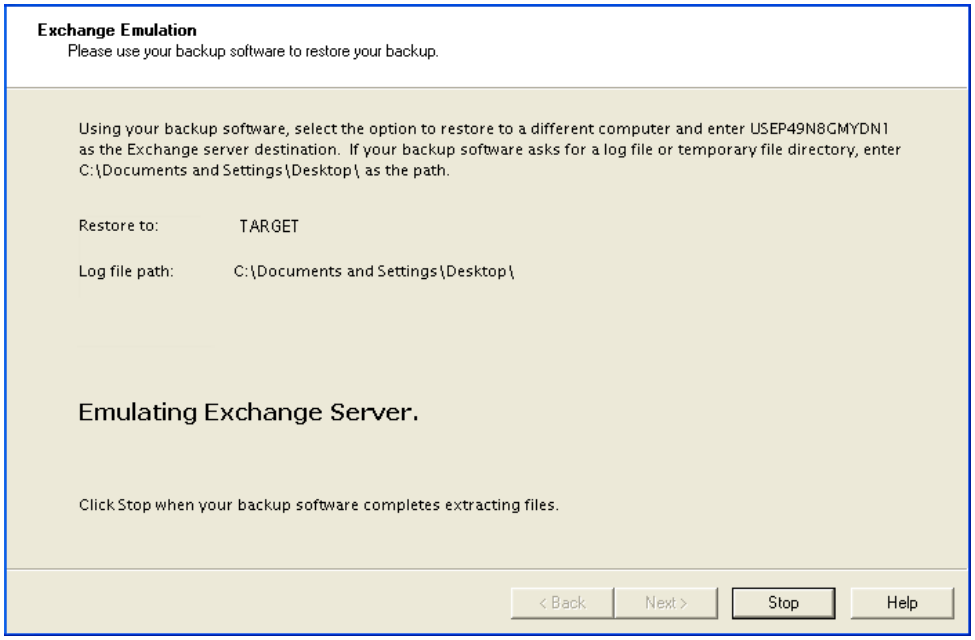
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 9-4. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into CommVault when prompted later in this section.*

10. Do one of the following:
    - **For CommVault Galaxy 8.0:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Databases" are installed and match the Windows Server version you are running.
    - **For CommVault Galaxy 7.0:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Server XXXX" match the Windows Server and Exchange Server versions you are running.
    - **For CommVault Galaxy 6.1:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Server XXXX" match the Windows Server and Exchange Server versions you are running.

    Note: *For Exchange Server 2007, CommVault uses "iDA for Exchange Server 2007 Database."*

    Note:

    - *You must run Ontrack PowerControls ExtractWizard in Advanced mode while running the CommVault installer.*
    - *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*
11. If you have already installed the Exchange Database iDataAgent for Exchange Server 5.5 and you want to emulate Exchange Server 2007, you must reinstall the Exchange Database iDataAgent with Ontrack PowerControls ExtractWizard running the correct emulation type. That is, the **Exchange Server 2007** option must be selected on the **Connection Parameters** page).

Copyright © 2011 Kroll Ontrack Inc.

12. Start CommCell Console on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **CommCell Console** window appears.
13. In the **CommCell Browser**, right-click the Exchange Server you want to restore and click **Browse & Recover**. The **Browse Options** window appears.
14. Specify the appropriate browse time for your recovery:
    - Browse the Latest Data
    - Specify Browse Time
15. In the **Browse Options** window, select your Exchange Server from the **Client Computer** drop-down menu.
16. Click **OK** to show the browse data for your Exchange Server.
17. Select the storage groups to restore.

    Note: *You can only restore data from under the Exchange Database tree node.*

18. Click **Recover All Selected**.
19. The **Restore Options for All Selected Items** window appears.
20. For CommVault 6.1 and 7.0:
    - Select the **Restore to a Different Client** option.
    - Select the **Restore Target Computer** from the **Select a Client** drop-down list. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
21. For CommVault 8.0, select the **Restore Target Computer** from the **Destination Computer** drop-down list.
22. Click **OK** to close the **Restore Options for All Selected Items** window.
23. When CommVault completes the restore, you can close CommCell Console.
24. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for CommVault Galaxy Backup & Recovery 5.0, 5.9, 6.1, 7.0, 8.0 and Exchange Server 2000/2003

Important: *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*

Use the following steps for performing Exchange emulation for CommVault Galaxy Backup & Recovery 5.0, 5.9, 6.1, 7.0, 8.0 with Exchange Server 2000/2003:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
    - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
    - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key:

Copyright © 2011 Kroll Ontrack Inc.

HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore \DLLPaths with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive\Path*\Esebcli2.dll**

Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

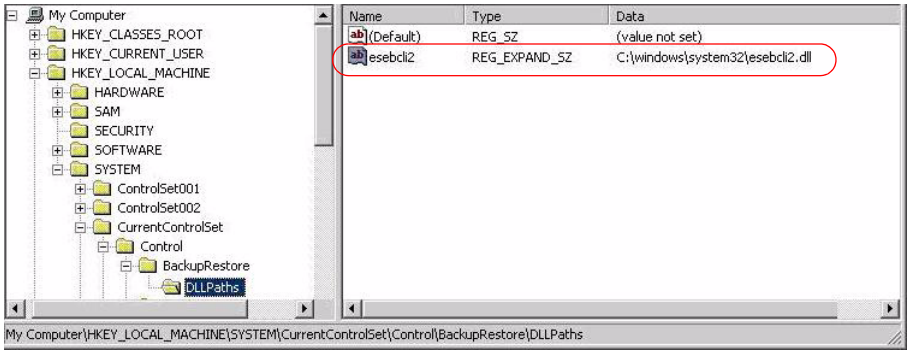

Figure 9-5. Example of Setting the Registry Key

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

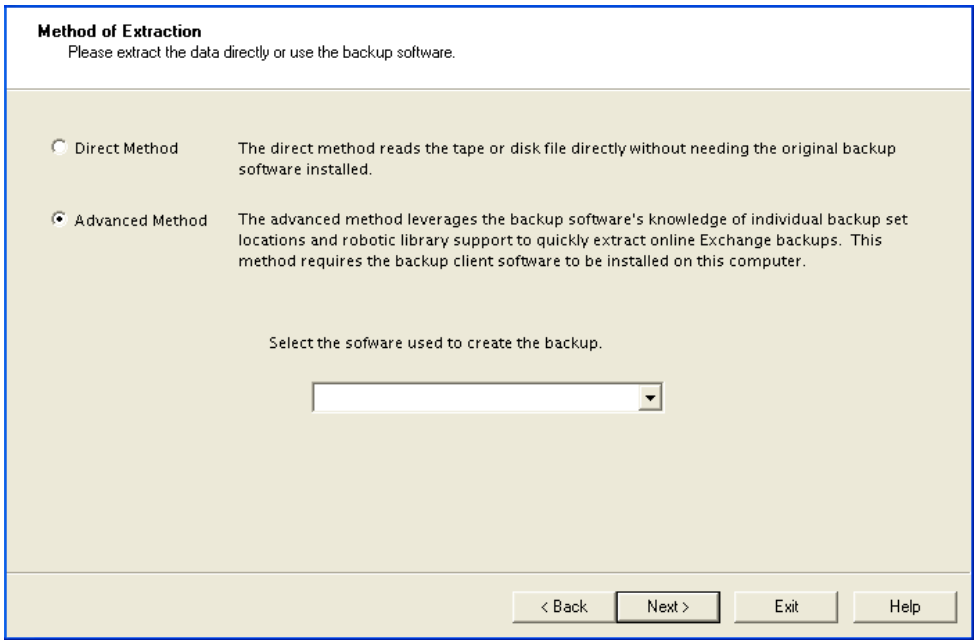
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 9-6. Method of Extraction Page for Advanced Method Advanced Method

5. Select **CommVault Galaxy Backup & Recovery** from the drop-down and click **Next**.

Copyright © 2011 Kroll Ontrack Inc.

6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000 or 2003** option.

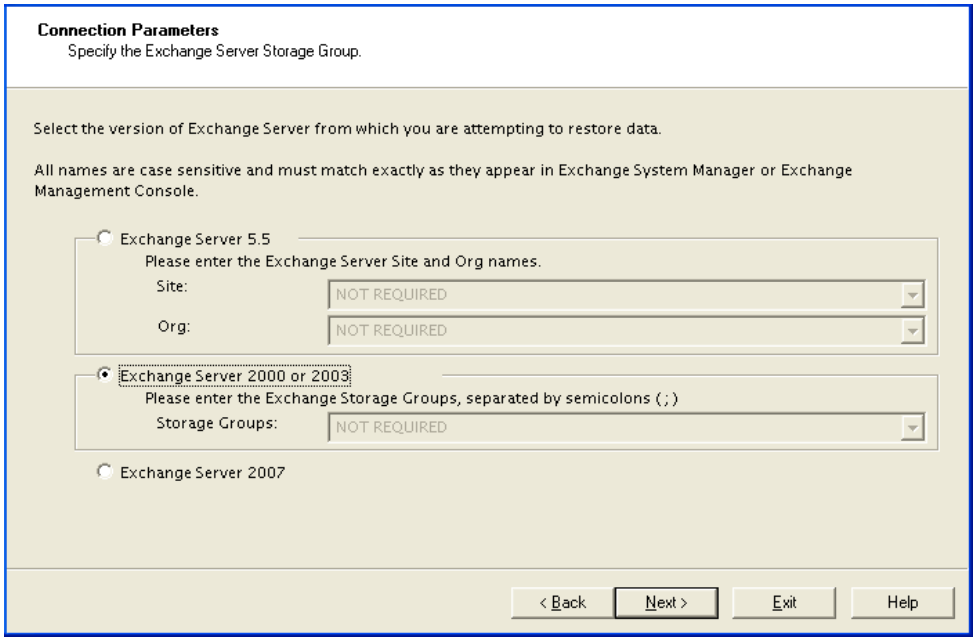
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
Exchange Server 2007
< Back
Next >
Exit
Help

Figure 9-7. Selecting Exchange Server 2000 or 2003 Connection Parameters

7. Click **Next**.
8. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
9. Click **Next**.
   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start CommVault Galaxy. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

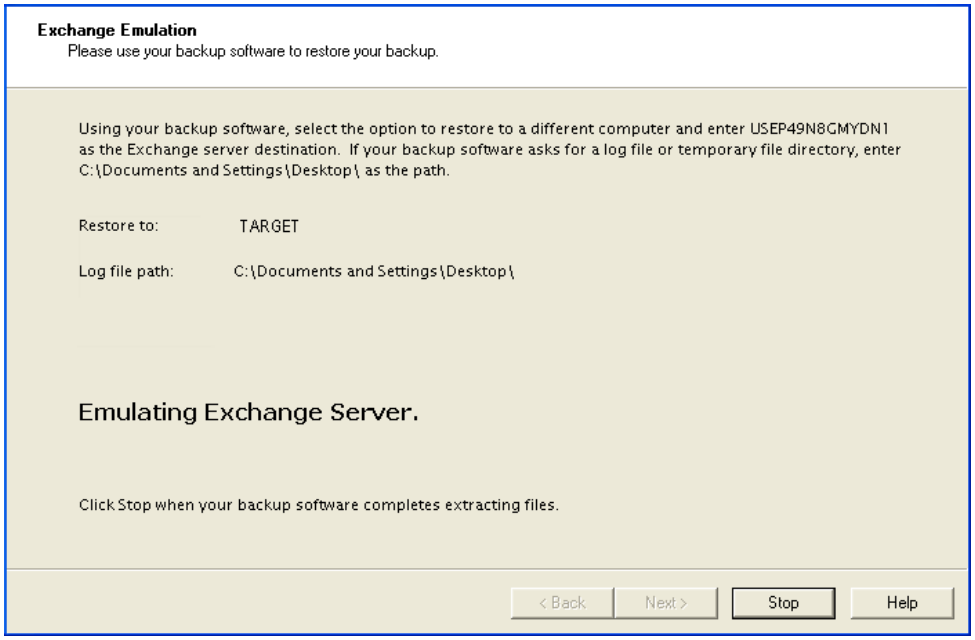
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 9-8. Exchange Emulation Page

Tip: *You can copy the "Log file path" information on this page and paste it into CommVault when prompted later in this section.*

10. Do one of the following:
    - **For CommVault Galaxy 8.0:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Server" are installed and match the Windows Server version you are running.
    - **For CommVault Galaxy 7.0:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Server XXXX" are installed and match the Windows Server and Exchange Server versions you are running.
    - **For CommVault Galaxy 6.1:** Make sure "iDA for Windows Server XXXX" and "iDA for Exchange Server XXXX" are installed and match the Windows Server and Exchange Server versions you are running.
    - **For CommVault Galaxy 5.9:** Make sure "iDA for Windows File Systems" software and "iDA for Exchange Database" software are installed on the computer running Ontrack PowerControls ExtractWizard.
    - **For CommVault Galaxy 5.0:** Make sure "CommVault Systems File System iDataAgent" software and "CommVault Systems Exchange Database iDataAgent" software are installed on the computer running Ontrack PowerControls ExtractWizard.

    Note:

    - *You must run Ontrack PowerControls ExtractWizard in Advanced mode while running the CommVault installer.*
    - *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*

Copyright © 2011 Kroll Ontrack Inc.

11. If you have already installed the Exchange Database iDataAgent for Exchange Server 5.5 and you want to emulate Exchange Server 2000/2003, you must reinstall the Exchange Database iDataAgent with Ontrack PowerControls ExtractWizard running the correct emulation type. That is, the **Exchange Server 2000 or 2003** option must be selected on the **Connection Parameters** page).
12. Start CommCell Console on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **CommCell Console** window appears.
13. In the **CommCell Browser**, right-click the Exchange Server you want to restore and click **Browse & Recover**. The **Browse Options** window appears.
14. Specify the appropriate browse time for your recovery:
    - Browse the Latest Data
    - Specify Browse Time
15. In the **Browse Options** window, select your Exchange Server from the **Client Computer** drop-down menu.
16. Click **OK** to show the browse data for your Exchange Server.
17. Select the storage groups to restore.

    Note: *You can only restore data from under the Exchange Database tree node.*

18. Click **Recover All Selected**.
19. The **Restore Options for All Selected Items** window appears.
20. For CommVault 6.1 and 7.0:
    - Select the **Restore to a Different Client** option.
    - Select the **Restore Target Computer** from the **Select a Client** drop-down list. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
21. For CommVault 8.0, select the **Restore Target Computer** from the **Destination Computer** drop-down list.
22. Click **OK** to close the **Restore Options for All Selected Items** window.
23. When CommVault completes the restore, you can close CommCell Console.
24. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for CommVault Galaxy Backup & Recovery and Exchange Server 5.5

Important: *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*

Use the following steps for performing Exchange emulation for CommVault Galaxy Backup & Recovery with Exchange Server 5.5:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to

Copyright © 2011 Kroll Ontrack Inc.

winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

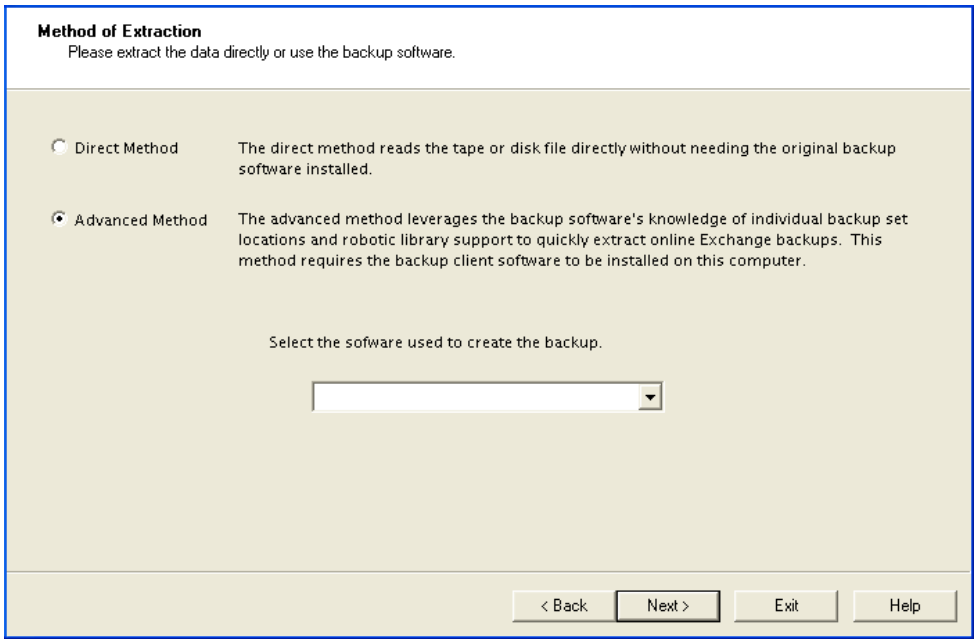
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 9-9. Method of Extraction Page for Advanced Method

5. Select **CommVault Galaxy Backup & Recovery** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 5.5** option.

Copyright © 2011 Kroll Ontrack Inc.

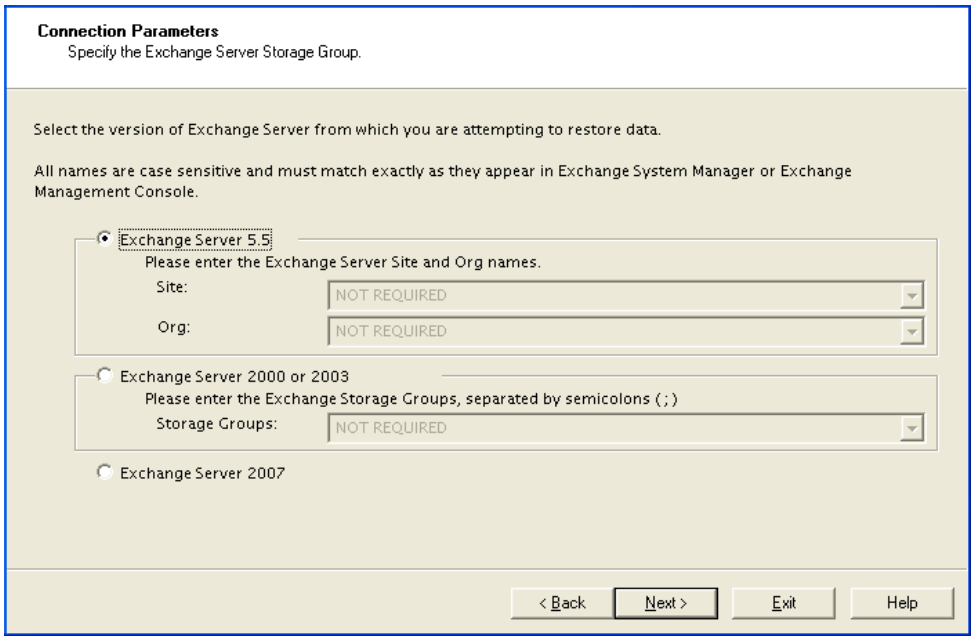
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
Exchange Server 2007
< Back
Next >
Exit
Help

Figure 9-10. Selecting Exchange Server 5.5 Connection Parameters

7. Click **Next**.
8. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
9. Click **Next**.
   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start CommVault Galaxy. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

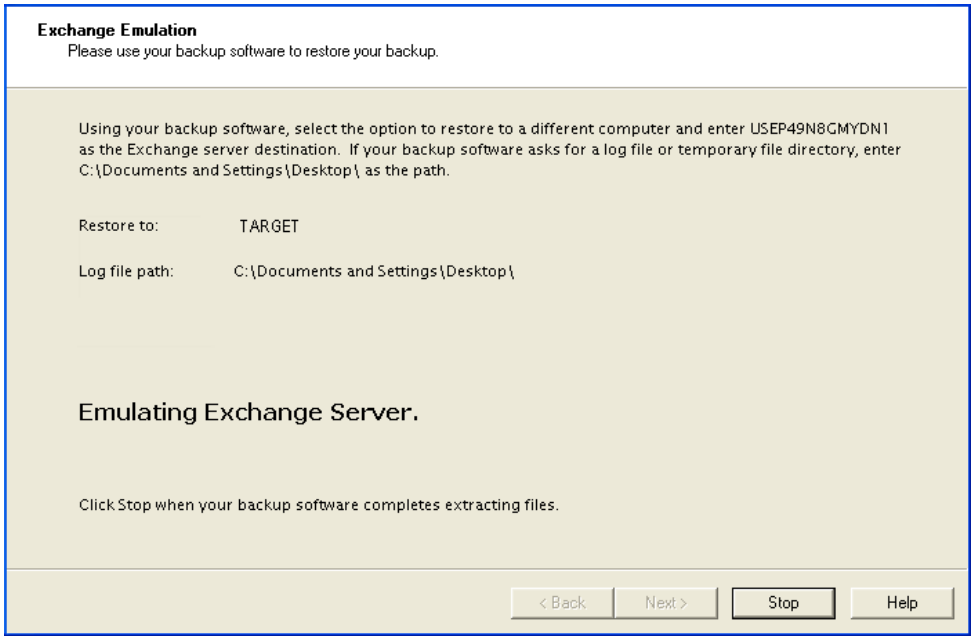
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 9-11. Exchange Emulation Page

Tip: *You can refer to the "Restore to" information on this page when verifying it in CommVault Galaxy Backup & Restore later in this section.*

10. Do one of the following:
    - **For CommVault Galaxy 5.9:** Make sure "iDA for Windows File Systems" software and "iDA for Exchange Database" software are installed on the computer running Ontrack PowerControls ExtractWizard.
    - **For CommVault Galaxy 5.0:** Make sure "CommVault Systems File System iDataAgent" software and "CommVault Systems Exchange Database iDataAgent" software are installed on the computer running Ontrack PowerControls ExtractWizard.

    Note:

    - *You must run Ontrack PowerControls ExtractWizard in Advanced mode while running the CommVault installer.*
    - *CommVault Galaxy will not install the Exchange agent onto a non-server OS. The Exchange agent is required for Ontrack PowerControls ExtractWizard to work.*
11. If you have already installed the Exchange Database iDataAgent for Exchange Server 2000/2003/2007 and you want to emulate Exchange Server 5.5, you must reinstall the Exchange Database iDataAgent with Ontrack PowerControls ExtractWizard running the correct emulation type. That is, the **Exchange Server 5.5** option must be selected on the **Connection Parameters** page.
12. Start CommCell Console on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **CommCell Console** window appears.
13. In the **CommCell Browser**, right-click the Exchange Server you want to restore and click **Browse & Recover**. The **Browse Options** window appears.

Copyright © 2011 Kroll Ontrack Inc.

14. Specify the appropriate browse time for your recovery:
    - Browse the Latest Data
    - Specify Browse Time
15. In the **Browse Options** window, select your Exchange Server from the **Client Computer** drop-down menu.
16. Click **OK** to show the browse data for your Exchange Server.
17. Select the Exchange backup you want to restore.

    Note: *You can only restore data from under the Exchange Database tree node. You cannot restore the Directory (DSA item).*

18. Click **Recover All Selected**. The **Restore Options for All Selected Items** window appears.
19. Select the **Restore to a Different Client** option.
20. Select the **Restore Target Computer** from the **Select a Client** drop-down list. Verify that you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
21. Click **OK**.
22. When CommVault completes the restore, you can close CommCell Console.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 10

USING THE EXCHANGE EMULATION METHOD - ULTRABAC

Overview

Use the following steps to use UltraBac as your client backup software.

Exchange Emulation for UltraBac and Exchange Server 2000/2003

Use the following steps for performing Exchange emulation for UltraBac with Exchange Server 2000/2003:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, do one of the following:
   - **Option 1:** Install the Exchange System Management Tools and update the system path to include the Exchsrvr\bin\ directory.
   - **Option 2:** Copy esebcli2.dll to the system path: winnt\system32 or windows\system32. (The esebcli2.dll file is located on the Exchange Server in the Exchange Server\bin directory.) Then set the registry key: **HKEY_LOCAL_MACHINE\System\CurrentControlSet\Control\BackupRestore\DLLPaths** with Value Name **Esebcli2**, Data Type **REG_EXPAND_SZ**, String ***Drive**Path*\Esebcli2.dll**

     Note for Windows 2000: *Use regedt32.exe to create a REG_EXPAND_SZ value.*

   Note: *For 64-bit operating systems, the esebcli2.dll must also be copied into the SysWoW64 folder.*

Copyright © 2011 Kroll Ontrack Inc.

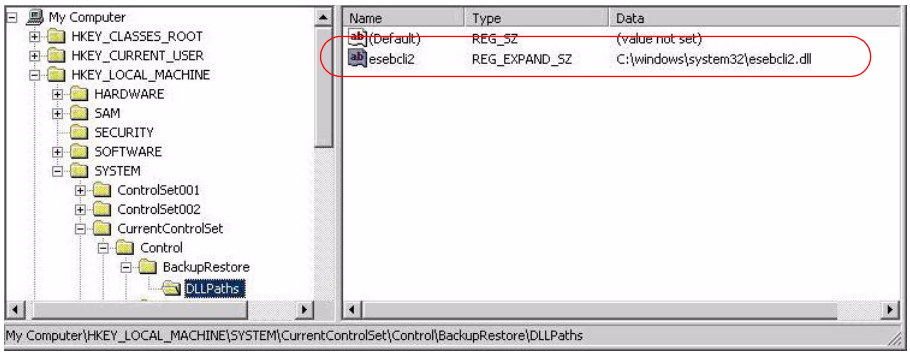

Figure 10-1. Example of Setting the Registry Key

2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

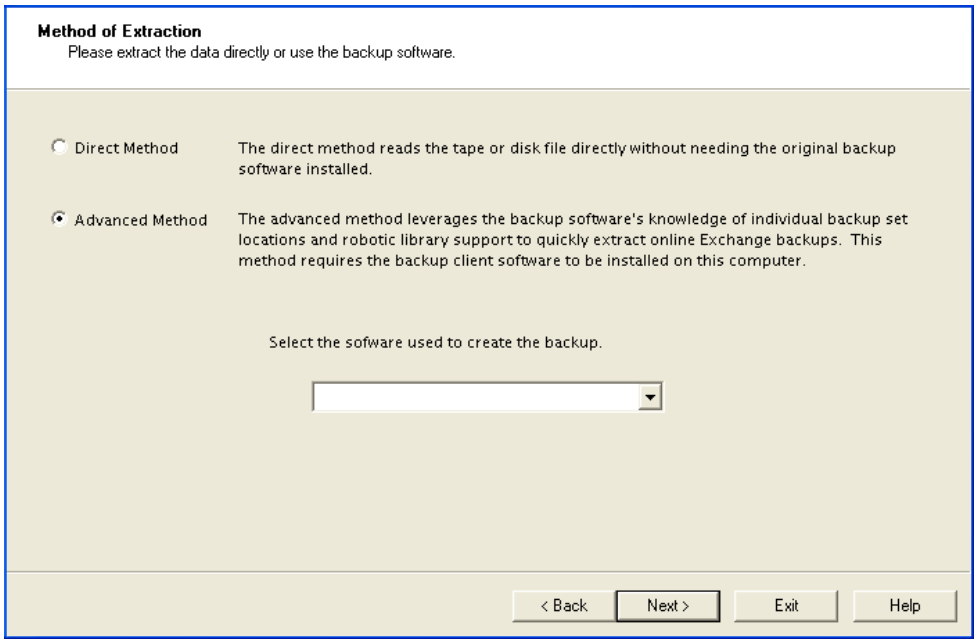
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 10-2. Method of Extraction Page for Advanced Method

5. Select **UltraBac** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select the **Exchange Server 2000 or 2003** option.

Copyright © 2011 Kroll Ontrack Inc.

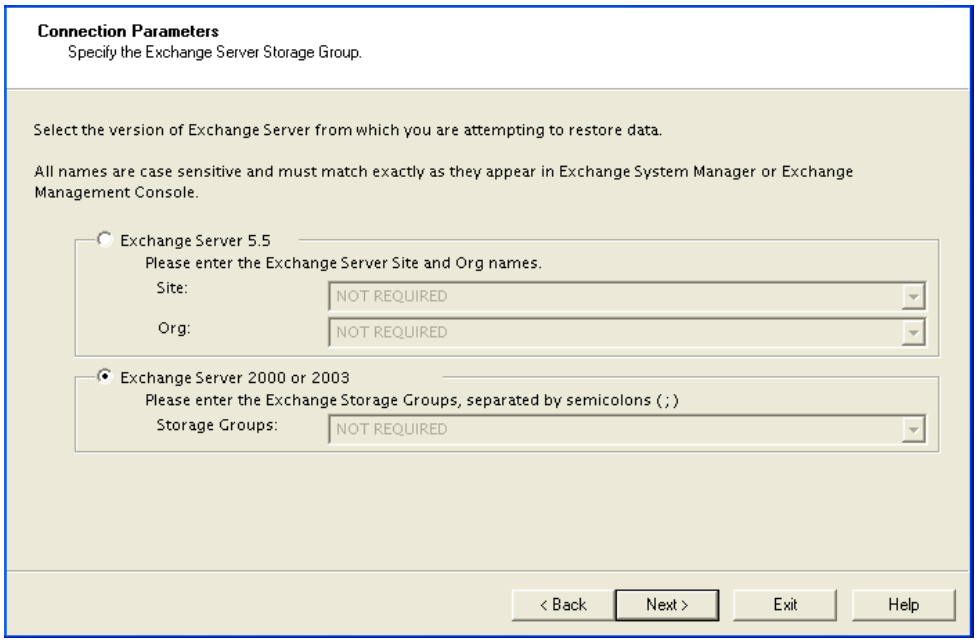
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 10-3. Selecting Exchange Server 2000 or 2003 Connection Parameters

7. Click **Next**.
8. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be a local drive of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
9. Click **Next**.
   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start UltraBac. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

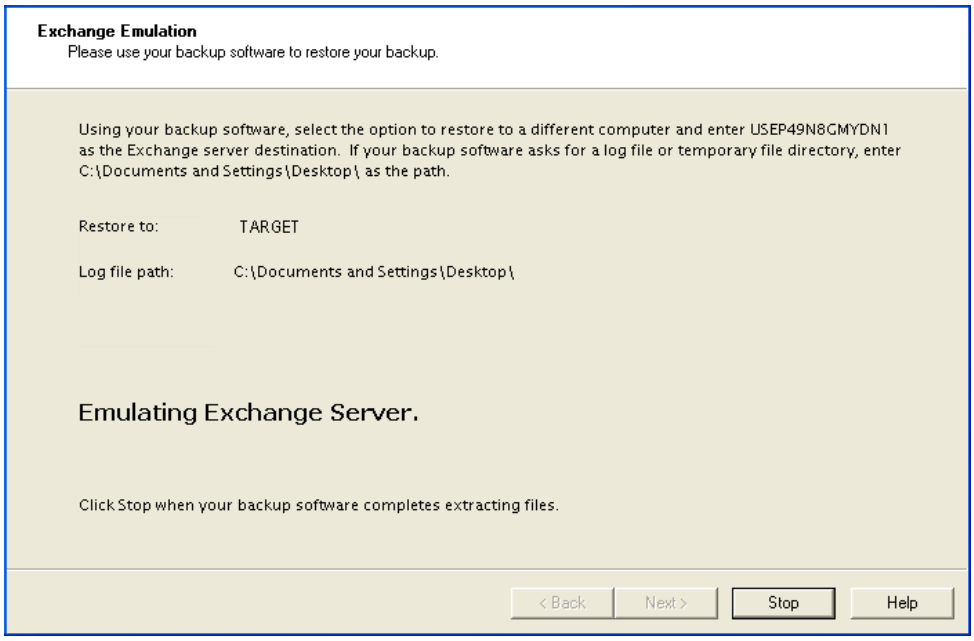
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 10-4. Exchange Emulation Page

Tip: *You can copy the "Restore to" and "Log file path" information on this page and paste it into UltraBac when prompted later in this section.*

10. Start **UltraBac Management Console** on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **UltraBac** window appears.
11. In UltraBac, click **Restore Wizard** on the toolbar. The **Select Index Source** window appears.
12. Select the appropriate source for your backup index, and click **Next**. The **Select Online Index** window appears.
13. Select the correct online index to load for your backup. Click **Next** to return to the UltraBac window.
14. In UltraBac, select the appropriate backup item to restore from the tree and list views. You can only restore one storage group at a time.

    Note: *You can only restore data from under the Exchange Agent tree node.*

15. Click **Restore**. The **General Restore Options** window appears.
16. Click **Exchange 2000, 2003 Options**. The **Exchange 2000, 2003-Specific Options** window appears.
17. Select the **Restore to Alternate Server** option. In its **Restore to** box, enter the name of the **Restore Target Computer** (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. Select the **Alternate Temporary Log File Directory** option. In its **Restore to** box, enter the log file path. Verify you are using the "Log file path" value from the Exchange Server Emulation page of the Ontrack PowerControls ExtractWizard.

Copyright © 2011 Kroll Ontrack Inc.

19. Click **OK**.
20. In the **General Restore Options** window, click **Next**. The **Restore Options** window appears.
21. Click **Restore**.
22. When UltraBac completes the restore, click **Exit** to close UltraBac.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Exchange Emulation for UltraBac and Exchange Server 5.5

Use the following steps for performing Exchange emulation for UltraBac with Exchange Server 5.5:

1. On the computer that will be running Ontrack PowerControls ExtractWizard, make sure edbbcli.dll is in the system path. The easiest way to ensure this is to copy edbbcli.dll to winnt\system32 or windows\system32. The edbbcli.dll file can be found on the Exchange Server in the Exchange Server\bin directory.
2. Start Ontrack PowerControls ExtractWizard. The computer running Ontrack PowerControls ExtractWizard is the Restore Target Computer.
3. Click **Next**.
4. On the **Method of Extraction** page of the Ontrack PowerControls ExtractWizard, select **Advanced Method**.

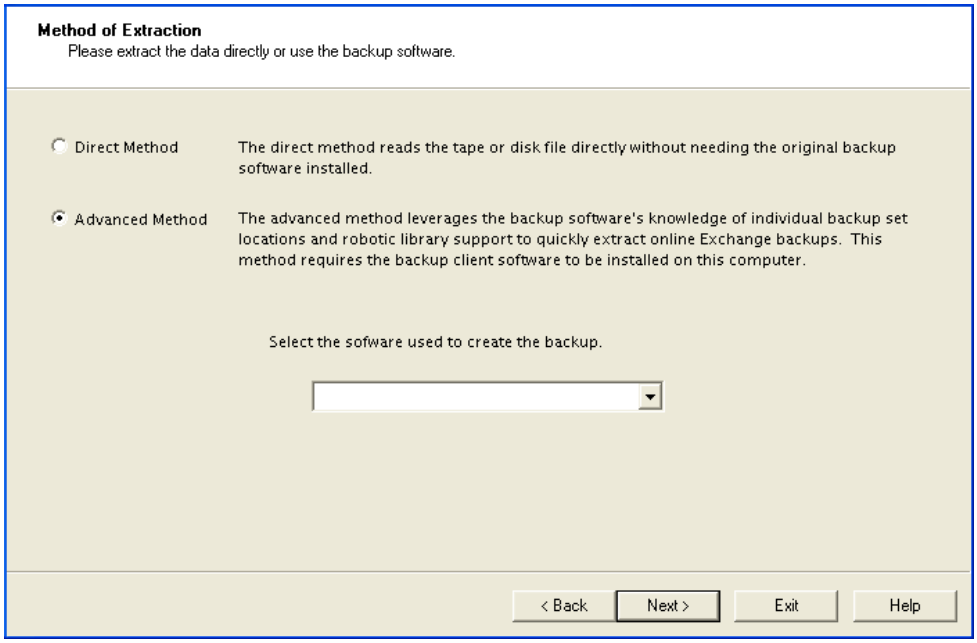
Method of Extraction
Please extract the data directly or use the backup software.
Direct Method
The direct method reads the tape or disk file directly without needing the original backup software installed.
Advanced Method
The advanced method leverages the backup software's knowledge of individual backup set locations and robotic library support to quickly extract online Exchange backups. This method requires the backup client software to be installed on this computer.
Select the sofware used to create the backup.
< Back
Next >
Exit
Help

Figure 10-5. Method of Extraction Page for Advanced Method

5. Select **UltraBac** from the drop-down and click **Next**.
6. On the **Connection Parameters** page of the Ontrack PowerControls ExtractWizard, select **Exchange Server 5.5**.

Copyright © 2011 Kroll Ontrack Inc.

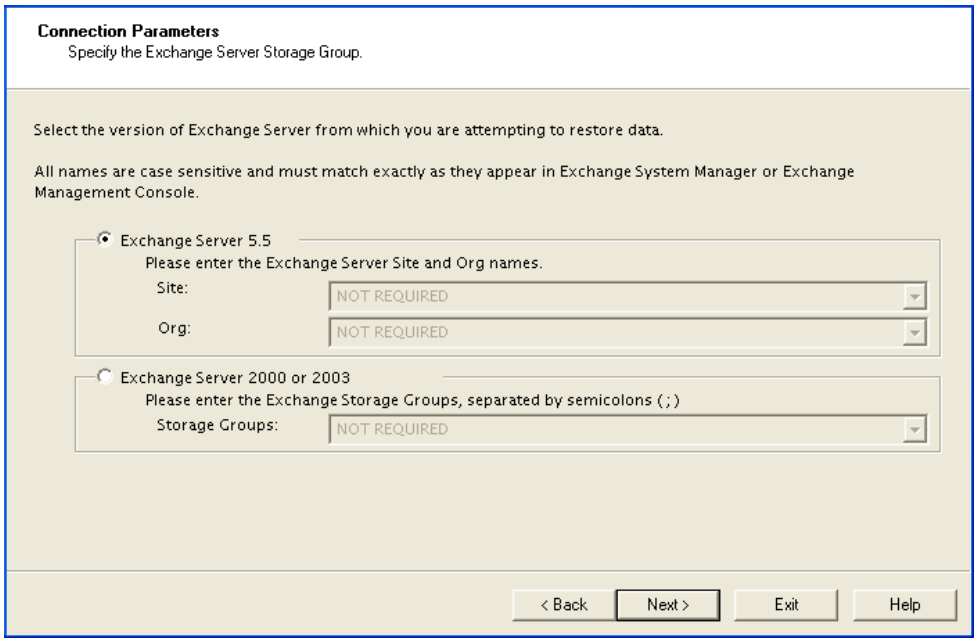
Connection Parameters
Specify the Exchange Server Storage Group.
Select the version of Exchange Server from which you are attempting to restore data.
All names are case sensitive and must match exactly as they appear in Exchange System Manager or Exchange Management Console.
Exchange Server 5.5
Please enter the Exchange Server Site and Org names.
Site:
NOT REQUIRED
Org:
NOT REQUIRED
Exchange Server 2000 or 2003
Please enter the Exchange Storage Groups, separated by semicolons (;)
Storage Groups:
NOT REQUIRED
< Back
Next >
Exit
Help

Figure 10-6. Selecting Exchange Server 5.5 Connection Parameters

7. Click **Next**.
8. On the **Destination Folder** page of the Ontrack PowerControls ExtractWizard, specify a location for the extracted files. This location must be of the form x:\Path where x is a valid drive letter that has an administrative share associated with it such as x$, and Path is the complete path to a folder (if a folder doesn't exist, Ontrack PowerControls ExtractWizard will create it).
9. Click **Next**.
   When the **Exchange Emulation** page changes from "Initializing" to "Emulating Exchange Server," you are ready to start UltraBac. Do not click the **Stop** button until you reach the end of these instructions.

Copyright © 2011 Kroll Ontrack Inc.

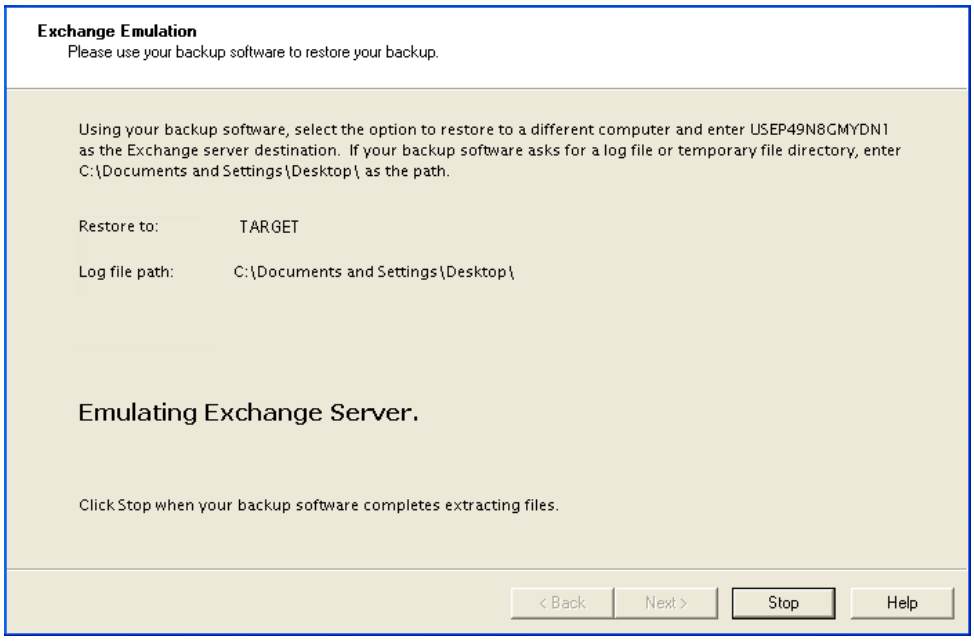
Exchange Emulation
Please use your backup software to restore your backup.
Using your backup software, select the option to restore to a different computer and enter USEP49N8GMYDN1 as the Exchange server destination. If your backup software asks for a log file or temporary file directory, enter C:\Documents and Settings\Desktop\ as the path.
Restore to: TARGET
Log file path: C:\Documents and Settings\Desktop\
Emulating Exchange Server.
Click Stop when your backup software completes extracting files.
< Back
Next >
Stop
Help

Figure 10-7. Exchange Emulation Page

Tip: *You can copy the "Restore to" information on this page and paste it into UltraBac when prompted later in this section.*

10. Start **UltraBac Management Console** on the computer you normally run your restores on. This can be the same computer as the one running Ontrack PowerControls ExtractWizard. The **UltraBac** window appears.
11. In UltraBac, click **Restore Wizard** on the toolbar. The **Select Index Source** window appears.
12. Select the appropriate source for your backup index. Click **Next**. The **Select Online Index** window appears.
13. Select the correct online index to load for your backup. Click **Next** to return to the UltraBac window.
14. Select the appropriate backup item to restore from the tree and list views.

    Note:

    - *You can only restore data from under the Exchange Agent tree node.*
    - *You cannot restore the Directory Store.*
15. Click **Restore**. The **General Restore Options** window appears.
16. Click **Exchange 5.5 Options**. The **Exchange 5.5-Specific Options** window appears.
17. Select the **Restore to Alternate Server** option. In its **Restore to** box, enter the name of the **Restore Target Computer** (i.e., the computer running Ontrack PowerControls ExtractWizard). Verify you are using the "Restore to" value from the Exchange Emulation page of the Ontrack PowerControls ExtractWizard.
18. Under **Databases to Restore**, select the appropriate option: Public Store, Private Store, or Both.
19. Click **OK**.

Copyright © 2011 Kroll Ontrack Inc.

20. In the **General Restore Options** window, click **Next**.
21. In the **Restore Options** window, click **Restore**.
22. When UltraBac completes the restore, click **Exit** to close UltraBac.
23. In Ontrack PowerControls ExtractWizard, click **Stop** and then click **Finish**.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 11

USING THE NATIVE METHOD - NETBACKUP 7.0

Overview

Use the following steps for the native restore method NetBackup 7.0 to restore an Exchange 2010 backup to an alternate folder location for use with Ontrack PowerControls for Exchange.

Native Restore Method for NetBackup 7.0

The native restore method for NetBackup 7.0 first creates a Recovery Database (RDB) on an Exchange Server 2010 (with a NetBackup 7.0 Client software installed), then runs the NetBackup 7.0 Client to restore a backup to the RDB.

Use the following steps for the native restore method NetBackup 7.0 to restore an Exchange 2010 backup to an alternate folder location for use with Ontrack PowerControls for Exchange.

1. Verify that the NetBackup 7.0 Server containing the backup you want restored is running.
2. On the Exchange Server 2010 you want to restore to, start the Exchange Management Shell and create a recovery database (RDB) – for more information, see http://technet.microsoft.com/en-us/library/ee332321.aspx.
3. At the shell prompt, enter:

   ```
   New-MailboxDatabase –Recovery –Name RDB1 –Server MBX2
   ```

   Note: *RDB1 is the name of the recovery database you want to create and MBX2 is the Exchange Server 2010 you want to create the database in.*

   Note: *You need to have the correct Mailbox Permissions to create a RDB – for more information, see http://technet.microsoft.com/en-us/library/dd638132.aspx.*

4. Once the RDB is created, start NetBackup 7.0 Client. (Click **Start**, select **All Programs**, and then select **Symantec NetBackup**. From the Symantec NetBackup program group, select **Backup, Archive, and Restore**.)
5. From the **File** menu, select **Specify NetBackup Machines and Policy Type**.
6. In the **Specify NetBackup Machines and Policy Type** dialog box, do the following:

Copyright © 2011 Kroll Ontrack Inc.

- In the **Server to use for backups and restores** list, select the correct server to use for restores. If the server does not appear in the selection, click **Edit Server List** and add it.
- In the **Source client for restores (or virtual client for backups)** list, select the server running Exchange from which the backup was created. If the source client does not appear in the selection, click **Edit Client List** and add it.
- In the **Policy type for restores** list, select MS-Exchange-Server
- Click **OK**.

7. On the **Backup, Archive, and Restore** window, click **Select for Restore** in the tool bar.
8. In the **All Folders** pane, select the backup you want to restore.
9. On the **Actions** menu, select **Restore**. The **Restore Marked Files** dialog box appears.
10. On the **Microsoft Exchange** page, make sure **Commit after last backup set is restored** is not selected.

    Note: *If Commit after last backup set is restored is selected, NetBackup will delete the files once they are restored.*

11. In the **Restore Marked Files** dialog box, select the **General** tab.
12. In the **Restore Destination Choices** group, select **Restore everything to a different location (maintaining existing structure)**.
13. In the **Destination** box, enter the path of the recovery database created in Step 2. For example: `Microsoft Information Store:\RDB1\`
14. Click **Start Restore**.
15. When asked “Do you want to view the progress of the restore?” click **Yes** to view the progress.

The restored data is in the recovery database you created in Step 2. You can now use PowerControls to open the edb file.

Copyright © 2011 Kroll Ontrack Inc.

CHAPTER 12

USING THE NATIVE METHOD - CA ARCSERVE R15

Overview

Use the following steps to use CA ARCserve Backup Manager to restore to a path in the Exchange Server 2010.

Note: *An Exchange 2010 backup can only be restored to an Exchange Server 2010 (to the same Exchange Server the backup was created or to a different Exchange Server 2010).*

Native Restore Method for CA ARCserve R15

Use the following steps to use CA ARCserve Backup Manager to restore to a path in the Exchange Server 2010:

1. Start CA ARCserve Backup Manager on the computer from which you restore data.
2. From the **Quick Start** menu, select **Restore**.
3. Select the **Source** tab, then expand **Exchange Organization** in the left pane.
4. Expand the Exchange Server 2010 you want to restore a backup from, then expand **Microsoft Exchange Server – Database Level**.
5. Select the backup you want to restore.

   Note: *You can select the backup version to restore by clicking **Version History**.*

6. Right-click the backup and select **Agent Option**.
7. In the Agent Option dialog box, clear all check boxes and click **OK**.
8. Select the **Destination** tab and clear the **Restore files to their original location(s)** check box.
9. Expand **Exchange Organization** in the left pane.
10. Expand the Exchange Server 2010 where the backup should be restored, then expand the **Microsoft Exchange Server – Database Level**.

Copyright © 2011 Kroll Ontrack Inc.

11. In the Destination box, the following appears: `\\<server name>\dbaedbvss`. Enter the file system path you want to restore to, for example: `\\<server name>\dbaedbvss\c:\temp\`.
12. Below the menu bar, click **Submit**
13. When prompted with "The mailbox database is not restored to Recovery Database!", click **OK**.
14. When the Restore Media dialog box appears, click **OK**.
15. In the **Session User Name and Password** dialog box, select the **Machine** tab, then:
    - Verify you have the correct user name and password for the machine you are restoring data to and click **OK**.

    -or-

    - Click **Edit** to change user name and password, and then click **OK**.

    Note: *You only need to supply user name and password for the machine you are restoring to. If you are warned "Some passwords for the destination are empty. Are you sure you want to continue?", click* ***OK*** *to proceed.*
16. In the Submit Job dialog box, click **OK** to proceed.

Once the restore job has completed you can use PowerControls to browse to the location where the backup was restored and open the edb file.

Copyright © 2011 Kroll Ontrack Inc.

Term	Description
BKF	An .MTF format backup-to-disk file, which is similar to other archive formats such as ZIP or ARJ. Backup software applications that output this file format are NT Backup (the version that shipped with Windows® 2000), Windows® Backup 2003 and XP, and Backup Exec.
CHK	Checkpoint files (.chk files) are used for recovering (playing) data from transaction logs into EDB files. The checkpoint is the place marker in the EDB.CHK file that indicates which transactions have been committed. Whenever data is written to an EDB file from the transaction log, the EDB.CHK file is updated with information specifying that the transaction was successfully committed to the respective EDB file. Separate Exx.chk files are maintained for each storage group using ESE (Extensible Store Engine).
Data Store	A unified collection of folders and messages contained in a single storage medium. A PST file is a data store. An Exchange Information Store is also a data store. In a basic case, Exchange has two live data stores, one for the private mailboxes and one for the public folders.
EIS	See Exchange Information Store.
Exchange Database	This file, which usually has an EDB extension, contains the mailbox, folders, and messages you see when connecting to an Exchange Server. The Exchange Server reads and writes to this file in response to incoming email and events from the clients. On Microsoft® Exchange Server 2000, this is one of the two files that make up the Exchange Information Store, the other being the STM file.
Exchange Information Store	This is the set of files that make up the data store for private mailboxes and public folders on an Exchange Server. For Microsoft® Exchange Server 5.5, this is the single Exchange Database file usually named priv1.edb and pub1.edb. On Microsoft® Exchange Server 2000, 2003, 2007, and 2010, the private mailbox data store will consist of the files priv1.edb and priv1.stm, and the public folder data store will consist of pub1.edb and pub2.stm.
Log Files	Transaction log files (.log files) are history files recording server activity. These files are useful in restoring and backing up Exchange data. Transaction logs for Microsoft Exchange Server 5.5, 2000, and 2003 are 5 MB in size. Transaction logs for Microsoft Exchange Server 2007 and Exchange Server 2010 are 1 MB in size.

Copyright © 2011 Kroll Ontrack Inc.

Term	Description
MTF	Microsoft® Tape Format is the format defined by Microsoft used to record files in a backup using NTBackup (Backup for NT4, 2000, XP) or BackupExec.
PAT	Patch files (.pat files) are used to record information on page splits in Microsoft Exchange Server 5.5 through Exchange Server 2000 (SP1). In Microsoft Exchange Server 2000 (SP2) and later, the functionality provided by .pat files is incorporated into Exchange log files.
PST	Personal Storage file. This file, used by Microsoft® Outlook, contains folders and messages that have been retrieved from a user's Exchange mailbox and copied locally.
Shortcut Menu	This menu is accessed by right-clicking on an item.
STM	For Microsoft Exchange Server 2000 and 2003, this is one of the two files that make up the Exchange Information Store, the other being the EDB file. The STM file stores certain data for emails that come into the Exchange Server through the POP or SMTP port. This email data may eventually get moved into the EDB file over time.

Copyright © 2011 Kroll Ontrack Inc.

INDEX

A

administrative rights to the NetWorker server 31
Advanced Method 25
  API Method for EMC NetWorker 31
  API Method for IBM Tivoli Storage Manager 27
  Emulation for UltraBac and Exchange Server 2000/2003 135
  Exchange Emulation for CA ARCserve and Exchange Server 2000/2003 91
  Exchange Emulation for CA ARCserve Backup 9.x-11.5 SP3 and Exchange Server 5.5 95
  Exchange Emulation for CommVault Galaxy Backup & Recovery 5.0, 5.9, 6.1, 7.0, 8.0 and Exchange Server 2000/2003 125
  Exchange Emulation for CommVault Galaxy Backup & Recovery 6.1, 7.0, 8.0 and Exchange Server 2007 121
  Exchange Emulation for CommVault Galaxy Backup & Recovery and Exchange Server 5.5 129
  Exchange Emulation for HP OpenView Storage Data Protector and Exchange Server 2000/2003/2007 51
  Exchange Emulation for HP OpenView Storage Data Protector and Exchange Server 5.5 56
  Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 2000/2003 101
  Exchange Emulation for NetBackup 4.5-5.1 and Exchange Server 5.5 105
  Exchange Emulation for NetBackup 6.0 and Exchange Server 2000/2003 108
  Exchange Emulation for NetBackup 6.0 and Exchange Server 5.5 112
  Exchange Emulation for NT Backup and Exchange 2000/2003/2007 on Windows 2000/XP/2003 41
  Exchange Emulation for NT Backup and Exchange 5.5 on Windows 2000/XP/2003 45
  Exchange Emulation for NT Backup and Exchange 5.5 on Windows NT 4 48
  Exchange Emulation for Symantec Backup Exec 12.0 and 12.5 and Exchange Server 2000/2003/2007 69
  Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 2000/2003 82
  Exchange Emulation for Symantec Backup Exec 8.6 and Exchange Server 5.5 86
  Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 2000/2003 61
  Exchange Emulation for Symantec Backup Exec 9.1/10.1 and Exchange Server 5.5 79
  Exchange Emulation for UltraBac and Exchange Server 5.5 139
API Method. *See also* Advanced Method 27
  requirements for using 26
  using 27

B

BKF 147

C

CHK 147
conventions in this manual 7

E

EIS 147
enabling licensing agent for 4
Exchange database 147
Exchange Emulation for Symantec Backup Exec 11d and Exchange Server 2000/2003/2007 65
Exchange Emulation. *See also* Advanced Method
  requirements for using 38
Exchange information store 147

I

Installing 3

L

license agents for Ontrack PowerControls 4
license file 6
log files 147

M

MTF 148

O

online Help 7
Ontrack PowerControls
  getting help 7
Ontrack PowerControls license agents 4

P

PAT 148
PST 148

R

rights
  administrative rights to the NetWorker server 31

Copyright © 2011 Kroll Ontrack Inc.

rights for using Exchange emulation
39

S

STM 148
system requirements 2

T

technical support 7

Copyright © 2011 Kroll Ontrack Inc.

Copyright © 2011 Kroll Ontrack Inc.

KROLL ONTRACK®

9023 Columbine Road
Eden Prairie, MN 55347
800 645 3649
www.ontrackpowercontrols.com

Copyright © 2011 Kroll Ontrack Inc.
All Rights Reserved.

All other brands and product names are trademarks or registered trademarks of their respective owners.